

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	CAN Solution
Product number	R-0820; R-0820-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) identification

<b>Physical hazards</b>	Corrosive to metals	Category 1
<b>Health hazards</b>	Eye damage/irritation	Category 1
	Skin corrosion/irritation	Category 1B
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.	

**Label elements**

Hazard pictograms



Signal word	Danger
Hazard statements	May be corrosive to metals. Causes severe skin burns and serious eye damage.
Precautionary statements	
Prevention	Do not breathe dust or mists. Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection if contact is likely to occur. Keep only in original container.
Response	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (OR HAIR): Immediately take off all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a physician or poison control center. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a physician or poison control center. Absorb spillage to prevent material damage.
Storage	Store in corrosive-resistant container with corrosive-resistant inner liner. Keep tightly capped. Store locked up. Store out of direct sunlight between 36°F–85°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazards not otherwise classified</b>	Not applicable

## SECTION 3: Composition/information on ingredients

**Mixture**

Chemical name	Common name and synonyms	CAS number	% w/w
Water	Dihydrogen oxide	7732-18-5	80-100
Sulfuric acid	Sulphuric acid; Dihydrogen sulfate	7664-93-9	7-13
Ceric ammonium nitrate	Ammonium hexanitratocerate	16774-21-3	7-13

## SECTION 4: First-aid measures

**If inhaled**

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops.

Give oxygen or artificial respiration if needed.

**In case of skin contact**

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops. Chemical burns must be treated by a physician.

**In case of eye contact**

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

**If swallowed**

Call a physician or poison control center immediately. Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs.

**Most important symptoms and effects, both acute and delayed**

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

**Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep person under observation. Symptoms may be delayed.

**General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**SECTION 5: Firefighting measures**

**Extinguishing media**

Suitable extinguishing media	Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Specific hazards arising from the substance or mixture**

Fire hazard	Not flammable
Explosion hazard	Not explosive
Reactivity	May be corrosive to metals
Hazardous combustion products	Sulfur oxides, cerium oxides, nitrogen oxides. Other irritating fumes and smoke.

**Advice for firefighters**

Precautionary measures	Exercise caution when fighting any chemical fire; hazardous fumes will be present.
Firefighting equipment/instructions	Use water spray or fog for cooling exposed containers.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	Refer to section 9 of the SDS for flammability properties.

**SECTION 6: Accidental release measures**

**Personal precautions, protective equipment, and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe dust or mists. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

**Environmental precautions**

Avoid discharge into drains, watercourses, or onto the ground.

**Methods and material for containment and cleaning up**

Ventilate the area. Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Dilute acid with water and neutralize with dilute base. If not recoverable, dilute with water or flush to holding area and neutralize. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

**SECTION 7: Handling and storage**

**Personal precautions, protective equipment, and emergency procedures**

Do not breathe dust or mists. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section

8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

**Conditions for safe storage, including any incompatibilities**

Store in corrosive-resistant container with corrosive-resistant inner liner. Keep tightly capped. Store locked up. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

**SECTION 8: Exposure controls/personal protection**

**Occupational exposure limits**

**US ACGIH Threshold Limit Values**

<u>Components</u>	<u>Type</u>	<u>Value</u>
Sulfuric acid (CAS 7664-93-9)	TWA	0.2 mg/m <sup>3</sup> (thoracic particulate)

**US NIOSH: Pocket Guide to Chemical Hazards**

<u>Components</u>	<u>Type</u>	<u>Value</u>
Sulfuric acid (CAS 7664-93-9)	TWA	1 mg/m <sup>3</sup>
Sulfuric acid (CAS 7664-93-9)	IDLH	15 mg/m <sup>3</sup>

**US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<u>Components</u>	<u>Type</u>	<u>Value</u>
Sulfuric acid (CAS 7664-93-9)	TWA	1 mg/m <sup>3</sup>

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Exposure controls**

Appropriate engineering controls    Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

Personal protective equipment

- Eye/face protection    Wear appropriate chemical safety goggles if contact is likely to occur.
- Skin protection    Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
- Body protection    Wear appropriate protective clothing if contact is likely to occur.
- Respiratory protection    In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

**SECTION 9: Physical and chemical properties**

**Information on basic physical and chemical properties**

Physical state	Liquid
Form	Liquid
Color	Orange
Odor	Pungent
Odor threshold	No data available
pH	0.5
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available

Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Solubility	No data available
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

**SECTION 10: Stability and reactivity**

<b>Reactivity</b>	May be corrosive to metals.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Bases, chlorates, halides, hydrogen peroxide, metal compounds, nitrates, nitromethane, organic materials, oxidizing agents, perchlorates, phosphorous, strong reducing agents, and sugars.
<b>Hazardous decomposition products</b>	No hazardous decomposition products under normal conditions.

**SECTION 11: Toxicological information**

**Information on toxicological effects**

Likely routes of exposure are skin/eye contact and ingestion.

<b>Most important symptoms/effects, acute and delayed</b>	Direct skin contact may cause corrosive skin burns, deep ulcerations, and possibly permanent scarring. Direct contact with concentrated solutions may be corrosive and may cause severe damage, including blindness. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing, choking, and wheezing. Inhalation could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed. May produce burns to lips, oral cavity, upper airway, esophagus, and possibly the digestive tract. Symptoms may include abdominal pain, vomiting, burns, perforations, and bleeding.
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**Acute toxicity** This product is not classified as an acute toxicity hazard. See below for product and individual ingredient acute toxicity data.

<b>Product</b>	<b>Species</b>	<b>Acute Toxicity Estimate (ATE)</b>
CAN Solution (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD <sub>50</sub>	Rat	No data available
<i>Inhalation</i>		
LC <sub>50</sub>	Rat	>5 mg/L
<i>Oral</i>		
LD <sub>50</sub>	Rat	>2000 mg/kg

<b>Components</b>	<b>Species</b>	<b>Acute Toxicity Data</b>
Sulfuric acid (CAS 7664-93-9)		
<b>Acute</b>		
<i>Dermal</i>		
LD <sub>50</sub>	Rat	No data available
<i>Inhalation</i>		
LC <sub>50</sub>	Rat	0.375 mg/L (for aerosol mists)
<i>Oral</i>		
LD <sub>50</sub>	Rat	2140 mg/kg
<b>Skin corrosion/irritation</b>		Causes severe skin burns

**Serious eye damage/eye irritation** Causes serious eye damage

**Respiratory sensitization** No data available

**Skin sensitization** No data available

**Germ cell mutagenicity** No data available

**Carcinogenicity**

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not regulated

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)**

Not regulated

**US National Toxicology Program (NTP) Report on Carcinogens**

Not regulated

**Reproductive toxicity** No data available

**Specific target organ toxicity (single exposure)** No data available

**Specific target organ toxicity (repeated exposure)** No data available

**Aspiration hazard** No data available

**SECTION 12: Ecological information**

**Ecotoxicity** This product is not classified as environmentally hazardous.

**Persistence and degradability** No data available

**Bioaccumulative potential** No data available

**Mobility in soil** No data available

**Other adverse effects** Large or frequent spills can have a harmful or damaging effect on the environment.

**SECTION 13: Disposal considerations**

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

**SECTION 14: Transport information**

**DOT**

**UN number** 2796  
**UN Proper shipping name** Sulphuric acid  
**Reportable Quantity** 1000 lbs  
**Class (Subsidiary risk)** 8  
**Label(s)** 8  
**Packing group** II  
**Special provisions** 386, A3, A7, B2, B15, IB2, N6, N34, T8, TP2  
**Packaging exceptions** 154  
**Packaging, non-bulk** 202

**IATA**

**UN number** 2796  
**UN Proper shipping name** Sulphuric acid  
**Class (Subsidiary risk)** 8  
**Packing group** II  
**Special provisions** None

**IMDG**

**UN number** 2796  
**UN Proper shipping name** Sulphuric acid  
**Class (Subsidiary risk)** 8  
**Packing group** II  
**Environmental hazards**

<b>Marine pollutant</b>	No
<b>Special provisions</b>	None
<b>EmS</b>	F-A, S-B
<b>Special precautions for user</b>	Read safety instructions, SDS, and emergency procedures before handling.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	This substance/mixture is not intended to be transported in bulk.

**DOT hazard pictograms**



**IATA; IMDG hazard pictograms**



**SECTION 15: Regulatory information**

**US federal regulations**

**CERCLA Hazardous Substance (40 CFR 302.4)**

<u>Chemical name</u>	<u>CAS number</u>	<u>Reportable Quantity</u>
Sulfuric acid	7664-93-9	1000 lbs

**SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)**

<u>Chemical name</u>	<u>CAS number</u>
Sulfuric acid	7664-93-9

**SARA 304 Emergency Release Notification**

<u>Chemical name</u>	<u>CAS number</u>
Sulfuric acid	7664-93-9

**SARA 311/312 Hazardous Chemical**

<u>Chemical name</u>	<u>CAS number</u>
Sulfuric acid	7664-93-9

**SARA 313 (TRI reporting)**

Not regulated

**TSCA Section 8(b) Chemical Inventory**

All components are on the U.S. EPA TSCA Inventory list.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)**

Not regulated

**Safe Drinking Water Act (SDWA)**

Not regulated

**US state regulations**

**California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)**

Not regulated

**Massachusetts Right-to-Know Act**

<u>Chemical name</u>	<u>CAS number</u>
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Sulfuric acid	7664-93-9
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**New Jersey Worker and Community Right-to-Know Act**

<b>Chemical name</b>	<b>CAS number</b>
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Sulfuric acid	7664-93-9
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**Pennsylvania Worker and Community Right-to-Know Act**

<b>Chemical name</b>	<b>CAS number</b>
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Sulfuric acid	7664-93-9
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**Rhode Island Right-to-Know Act**

<b>Chemical name</b>	<b>CAS number</b>
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Sulfuric acid	7664-93-9
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**SECTION 16: Other information**

**NFPA Rating**

Health hazard	2
Fire hazard	0
Reactivity	0
Specific	N/A

**Disclaimer**

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**Issue date:**

May 2015

**Last revisions**

May 2019

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Chromate Indicator
Product number	R-0630; R-0630-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548
<b>Emergency phone number</b>	
CHEMTREC, United States	1-800-424-9300 – 24-hour service
CHEMTREC, International	+1 703-741-5970 – 24-hour service

## SECTION 2: Hazard(s) identification

<b>Physical hazards</b>	Not applicable	
<b>Health hazards</b>	Eye damage/irritation	Category 2
	Skin corrosion/irritation	Category 2
	Carcinogenicity	Category 1B
	Germ cell mutagenicity	Category 1B
	Skin sensitization	Category 1
<b>Environmental hazards</b>	Acute (short-term) aquatic toxicity hazard	Category 1
	Chronic (long-term) aquatic toxicity hazard	Category 1
<b>Label elements</b>		
Hazard pictograms		
Signal word	Danger	
Hazard statements	Causes skin irritation. Causes serious eye irritation. May cause cancer. May cause genetic defects. May cause an allergic skin reaction. Very toxic to aquatic life, with long-lasting effects.	
<b>Precautionary statements</b>		
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection if contact is likely to occur. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Avoid release into the environment.	
Response	<p>IF ON SKIN: Wash with plenty of water.</p> <p>IF SKIN IRRITATION OR RASH OCCURS: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.</p> <p>IF EYE IRRITATION PERSISTS: Get medical advice/attention.</p> <p>IF EXPOSED OR CONCERNED: Get medical advice/attention.</p> <p>Collect spillage.</p>	
Storage	Store locked up. Keep tightly capped. Store out of direct sunlight between 36°F–85°F.	

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations

**Hazards not otherwise classified** Not applicable

### SECTION 3: Composition/information on ingredients

#### Mixture

Chemical name	Common name and synonyms	CAS number	% w/w
Water	Dihydrogen oxide	7732-18-5	80-100
Potassium Chromate	Dipotassium chromate	7789-00-6	5-10

### SECTION 4: First-aid measures

#### If inhaled

Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

#### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical attention if irritation develops.

#### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice.

#### If swallowed

Immediately call a physician or poison control center. Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs.

#### Most important symptoms and effects, both acute and delayed

Direct skin or eye contact may cause serious irritation. Symptoms may include redness or itching. Tearing of the eyes or blurred vision may occur. Skin contact may cause allergic skin reaction, dermatitis or rash. Inhalation may cause respiratory irritation, such as coughing. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea. This product contains material that may be carcinogenic or mutagenic to humans.

Refer to section 11 of the SDS for delayed and immediate effects and chronic effects from short- and long-term exposure. Refer to section 7 for precautions for safe handling.

#### Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

#### General information

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### SECTION 5: Firefighting measures

#### Extinguishing media

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### Specific hazards arising from the substance or mixture

Fire hazard Not flammable

Explosion hazard Not explosive

Reactivity May be corrosive to metals.

Hazardous combustion products Chromium oxides, potassium oxides. During fire, gases hazardous to health may be formed.

#### Advice for firefighters

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.

Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Other information Refer to section 9 of the SDS for flammability properties.

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment, and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe dust or mists. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

#### Environmental precautions

Avoid discharge into drains, watercourses, or onto the ground.

### Methods and material for containment and cleaning up

Ventilate the area. Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water to remove residual contamination. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of large spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

### Reference to other sections

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

## SECTION 7: Handling and storage

### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust or mists. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

### Conditions for safe storage, including any incompatibilities

Store locked up. Keep tightly capped. Store out of direct sunlight between 36°F-85°F. Store away from incompatible materials (refer to section 10 of the SDS).

## SECTION 8: Exposure controls/personal protection

### Occupational exposure limits

#### US ACGIH Threshold Limit Values

Components	Type	Value
Potassium chromate (CAS 7789-00-6) as Cr (VI)	TWA	0.0002 mg/m <sup>3</sup>
Potassium chromate (CAS 7789-00-6) as Cr (VI)	STEL	0.0005 mg/m <sup>3</sup>

#### US NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Potassium chromate (CAS 7789-00-6) as Cr (VI)	TWA	0.0002 mg/m <sup>3</sup>

#### US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Potassium chromate (CAS 7789-00-6) as Cr (VI)	TWA	0.005 mg/m <sup>3</sup>
Potassium chromate (CAS 7789-00-6) as Cr (VI)	Ceiling	0.1 mg/m <sup>3</sup>

### Biological limit values

#### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Potassium chromate (CAS 7789-00-6) as Cr (VI)	10 µg/L	Total chromium	Urine	Increase during shift
Components	Value	Determinant	Specimen	Sampling Time
Potassium chromate (CAS 7789-00-6) as Cr (VI)	25 µg/L	Total chromium	Urine	End of shift at end of work week

### Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

#### Personal protective equipment

Eye/face protection Wear appropriate safety glasses with side shields (or goggles) if contact is likely to occur.

Skin protection Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.

Body protection Wear appropriate protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Light yellow
Odor	Odorless
Odor threshold	No data available
pH	9
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## SECTION 10: Stability and reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions of use, storage, and transport.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong reducing agents. Combustibles, organic materials, powdered metals.
<b>Hazardous decomposition products</b>	No hazardous decomposition products under normal conditions.

## SECTION 11: Toxicological information

### Information on likely routes of exposure

Inhalation	Avoid inhalation of this product. Use in a well-ventilated area.
Skin contact	Protect exposed skin from contact. Use caution to avoid splashes.
Eye contact	Avoid close eye contact; Use caution to avoid splashes. Wear eye protection.
Ingestion	Do not ingest. Avoid accidental ingestion by observing good hygiene practices. Wash hands thoroughly after handling this product.

### Symptoms related to the physical, chemical, and toxicological characteristics

Direct skin or eye contact may cause serious irritation. Skin contact may cause allergic skin reaction, dermatitis or rash. This product contains material that may be carcinogenic or mutagenic to humans, based on sufficient evidence of carcinogenicity in humans. May cause heritable genetic damage.

Refer to section 4 of the SDS for most important symptoms and effects.

### Acute toxicity

This product is not classified as an acute toxicity hazard. Acute toxicity estimate (ATE) has been calculated based on chapter 3 of GHS. 0% of the mixture consists of ingredient(s) with unknown acute toxicity.

**Product acute toxicity estimate (ATE)**

<b>ATEmix (Oral)</b>	> 2500 mg/kg
<b>ATEmix (Dermal)</b>	No data available
<b>ATEmix (Inhalation)</b>	No data available

<b>Component(s)</b>	<b>Species</b>	<b>Acute toxicity data</b>
<b>Potassium Chromate (CAS 7789-00-6)</b>		
LD50 (Oral)	Mouse	180 mg/kg (source: vendor)
LD50 (Dermal)	Rabbit	No data available
LC50 (Inhalation)	Rat	No data available
<b>Skin corrosion/irritation</b>	Causes skin irritation.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.	
<b>Respiratory sensitization</b>	No data available	
<b>Skin sensitization</b>	May cause an allergic skin reaction.	
<b>Germ cell mutagenicity</b>	May cause genetic defects.	
<b>Carcinogenicity</b>		
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Chromium(VI) Compounds, Group 1; Carcinogenic to humans		
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)</b>		
Chromium(VI) Compounds; Cancer		
<b>US National Toxicology Program (NTP) Report on Carcinogens</b>		
Chromium(VI) Compounds, Known to be a human carcinogens		
<b>Reproductive toxicity</b>	No data available	
<b>Specific target organ toxicity (single exposure)</b>	No data available	
<b>Specific target organ toxicity (repeated exposure)</b>	No data available	
<b>Aspiration hazard</b>	No data available	

**SECTION 12: Ecological information**

<b>Ecotoxicity</b>	Very toxic to aquatic life, with long-lasting effects.	
<b>Potassium Chromate (CAS 7789-00-6)</b>		
EC50	Crustacea (Water flea)	0.024 mg/L, 48 hours (source: vendor)
LC50	Fish (Sheepshead minnow)	23 – 27 mg/L, 96 hours (source: vendor)
<b>Persistence and degradability</b>	No data available	
<b>Bioaccumulative potential</b>	No data available	
<b>Mobility in soil</b>	No data available	
<b>Other adverse effects</b>	Large or frequent spills can have a harmful or damaging effect on the environment.	

**SECTION 13: Disposal considerations**

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

**SECTION 14: Transport information**

<b>DOT</b>		
<b>UN number</b>	3082	
<b>UN Proper shipping name</b>	Environmentally hazardous substances, liquid, N.O.S. (Potassium chromate)	
<b>Reportable Quantity</b>	10lbs, Potassium chromate	
<b>Class (Subsidiary risk)</b>	9	
<b>Label(s)</b>	9	
<b>Packing group</b>	III	
<b>Special provisions</b>	8, 146, 173, 335, IB3, T4, TP1, TP29	

Packaging exceptions 155  
Packaging, non-bulk 203

**IATA**

UN number 3082  
UN Proper shipping name Environmentally hazardous substances, liquid, N.O.S. (Potassium chromate)  
Class (Subsidiary risk) 9  
Packing group III  
Special provisions A97, A158, A197

**IMDG**

UN number 3082  
UN Proper shipping name Environmentally hazardous substances, liquid, N.O.S. (Potassium chromate)  
Class (Subsidiary risk) 9  
Packing group III  
Environmental hazards  
Marine pollutant Yes  
Special provisions 274, 335, 969  
EmS F-A, S-F

**Special precautions for user** Read safety instructions, SDS, and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.

**DOT hazard pictograms**



**IATA; IMDG hazard pictograms**



**SECTION 15: Regulatory information**

**US federal regulations**

**CERCLA Hazardous Substance (40 CFR 302.4)**

<u>Chemical name</u>	<u>CAS number</u>	<u>Reportable Quantity</u>
Potassium Chromate	7789-00-6	10 lbs

**SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)**

Not regulated

**SARA 304 Emergency Release Notification**

Not regulated

**SARA 311/312 Hazardous Chemical**

<u>Chemical name</u>	<u>CAS number</u>
Potassium Chromate	7789-00-6

**SARA 313 (TRI reporting)**

<u>Chemical name</u>	<u>CAS number</u>
Potassium Chromate	7789-00-6

**TSCA Section 8(b) Chemical Inventory**

All components are on the U.S. EPA TSCA Inventory list.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

<u>Chemical name</u>	<u>CAS number</u>
Potassium Chromate	7789-00-6

**Other federal regulations**

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)

<u>Chemical name</u>	<u>CAS number</u>
Potassium Chromate	7789-00-6

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

### Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)

<u>Chemical name</u>	<u>CAS number</u>
Potassium Chromate	7789-00-6

### Safe Drinking Water Act (SDWA)

<u>Chemical name</u>	<u>CAS number</u>
Potassium Chromate	7789-00-6

### US state regulations

#### California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

<u>Chemical name</u>	<u>CAS number</u>
Potassium Chromate	7789-00-6

**WARNING:** This product can expose you to Potassium chromate (hexavalent chromium compound), which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### Massachusetts Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Potassium Chromate	7789-00-6

#### New Jersey Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Potassium Chromate	7789-00-6

#### Pennsylvania Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Potassium Chromate	7789-00-6

#### Rhode Island Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Potassium Chromate	7789-00-6

## SECTION 16: Other information

### NFPA Rating

Health hazard	3
Fire hazard	0
Reactivity	0
Specific	N/A

### Disclaimer

The information in the Safety Data Sheet is offered for your consideration and guidance for safe handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy of completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

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### Issue date:

May 2015

### Revision date:

11/17/2021

### Revision information:

This document embodies significant change(s) that may impact classification, safe handling, or health information for the associated product(s). The information contained herein should be reviewed in its entirety before handling material.

Identification: Emergency response

Hazard identification: Classification

First-aid: Most important symptoms and effects, both acute and delayed

Toxicological Information: Information on likely routes of exposure

*Supersedes revision dated January 2018.*



# SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Ferroun Indicator
Product number	R-0819; R-0819-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) identification

<b>Physical hazards</b>	Not applicable
<b>Health hazards</b>	Not applicable
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
<b>Label elements</b>	
Hazard pictograms	Not applicable
Signal word	Not applicable
Hazard statements	Not applicable
Precautionary statements	
Prevention	Avoid contact with skin, eyes, or clothing. For contact with skin or eyes, flush 20 minutes with water. If ingested, contact physician or local poison control center. Treat symptoms as needed.
Response	This reagent is not defined as a hazardous chemical per OSHA's Hazard Communication Standard 2012; however, use care when handling.
Storage	Keep tightly capped. Store out of direct sunlight between 36°F–85°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazards not otherwise classified</b>	Not applicable

## SECTION 3: Composition/information on ingredients

<b>Mixture</b>			
<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>% w/w</b>
Water	Dihydrogen oxide	7732-18-5	80-100
1,10-Phenanthroline monohydrate	o-Phenanthroline monohydrate	5144-89-8	1-5
Nonhazardous and other components below reportable levels	Not applicable	Not applicable	0.1-1

## SECTION 4: First-aid measures

### If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

**If swallowed**

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice/attention.

**Most important symptoms and effects, both acute and delayed**

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

**Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**SECTION 5: Firefighting measures****Extinguishing media**

Suitable extinguishing media	Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Specific hazards arising from the substance or mixture**

Fire hazard	Not flammable
Explosion hazard	Not explosive
Reactivity	Hazardous reactions will not occur under normal conditions.
Hazardous combustion products	Carbon oxides, sodium oxides, nitrogen oxides. Other irritating fumes and smoke.

**Advice for firefighters**

Precautionary measures	Exercise caution when fighting any chemical fire; hazardous fumes will be present.
Firefighting equipment/instructions	Use water spray or fog for cooling exposed containers.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	Refer to section 9 of the SDS for flammability properties.

**SECTION 6: Accidental release measures****Personal precautions, protective equipment, and emergency procedures**

Wear appropriate protective equipment and clothing during cleanup. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

**Environmental precautions**

Avoid discharge into drains, watercourses, or onto the ground.

**Methods and material for containment and cleaning up**

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

**SECTION 7: Handling and storage****Personal precautions, protective equipment, and emergency procedures**

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

**Conditions for safe storage, including any incompatibilities**

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

**SECTION 8: Exposure controls/personal protection****Occupational exposure limits****US ACGIH Threshold Limit Values**

Not regulated

**US NIOSH: Pocket Guide to Chemical Hazards**

Not regulated

## US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Not regulated

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Exposure controls

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.
Personal protective equipment	
Eye/face protection	Wear appropriate chemical safety goggles if contact is likely to occur.
Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Dark Red
Odor	Odorless
Odor threshold	No data available
pH	3.2
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## SECTION 10: Stability and reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Acids and strong oxidizing agents.

**SECTION 11: Toxicological information**

**Information on toxicological effects**

Likely routes of exposure are skin/eye contact and ingestion.

**Most important symptoms/effects, acute and delayed**

Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching.

Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

**Acute toxicity**

This product is not classified as an acute toxicity hazard. See below for product and individual ingredient acute toxicity data.

<b>Product</b>	<b>Species</b>	<b>Acute Toxicity Estimate (ATE)</b>
Ferroin Indicator (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD <sub>50</sub>	Rat	No data available
<i>Inhalation</i>		
LC <sub>50</sub>	Rat	No data available
<i>Oral</i>		
LD <sub>50</sub>	Rat	>2000 mg/kg
<b>Components</b>	<b>Species</b>	<b>Acute Toxicity Data</b>

1,10-Phenanthroline monohydrate (5144-89-8)

**Acute**

*Dermal*

LD<sub>50</sub>

Rat

No data available

*Inhalation*

LC<sub>50</sub>

Rat

No data available

*Oral*

LD<sub>50</sub>

Rat

132 mg/kg

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory sensitization**

No data available

**Skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not regulated

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)**

Not regulated

**US National Toxicology Program (NTP) Report on Carcinogens**

Not regulated

**Reproductive toxicity**

No data available

**Specific target organ toxicity (single exposure)**

No data available

**Specific target organ toxicity (repeated exposure)**

No data available

**Aspiration hazard**

No data available

## SECTION 12: Ecological information

<b>Ecotoxicity</b>	This product is not classified as environmentally hazardous.
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	Large or frequent spills can have a harmful or damaging effect on the environment.

## SECTION 13: Disposal considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport information

<b>DOT</b>	Not regulated as dangerous goods
<b>IATA</b>	Not regulated as dangerous goods
<b>IMDG</b>	Not regulated as dangerous goods

## SECTION 15: Regulatory information

### US federal regulations

#### **CERCLA Hazardous Substance (40 CFR 302.4)**

Not regulated

#### **SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)**

Not regulated

#### **SARA 304 Emergency Release Notification**

Not regulated

#### **SARA 311/312 Hazardous Chemical**

<u>Chemical name</u>	<u>CAS number</u>
1,10-Phenanthroline monohydrate	5144-89-8

#### **SARA 313 (TRI reporting)**

Not regulated

#### **TSCA Section 8(b) Chemical Inventory**

All components are on the U.S. EPA TSCA Inventory list.

#### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

### Other federal regulations

#### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)**

Not regulated

#### **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

#### **Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)**

Not regulated

#### **Safe Drinking Water Act (SDWA)**

Not regulated

### US state regulations

#### **California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)**

Not regulated

#### **Massachusetts Right-to-Know Act**

Not regulated

#### **New Jersey Worker and Community Right-to-Know Act**

Not regulated

**Pennsylvania Worker and Community Right-to-Know Act**

Not regulated

**Rhode Island Right-to-Know Act**

Not regulated

**SECTION 16: Other information**

**NFPA Rating**

Health hazard	0
Fire hazard	0
Reactivity	0
Specific	N/A

**Disclaimer**

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**Issue date:**

May 2015

**Last revisions**

May 2019

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Hardness Buffer
Product number	R-0619; R-0619B; R-0619LB; R-0619B-PL; R-0619LB-PL
<b>Recommended use and restrictions</b>	Water analysis. To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Local: (410) 472-4340 – 8am – 5pm EST Toll-free: (800) 837-8548 – 8am – 5pm EST
<b>Emergency phone number</b>	
CHEMTREC, United States	1-800-424-9300 – 24-hour service
CHEMTREC, International	+1 703-741-5970 – 24-hour service

## SECTION 2: Hazard(s) Identification

<b>Physical hazards</b>	Not applicable	
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Eye damage/irritation	Category 1
	Skin corrosion/irritation	Category 1C
<b>Environmental hazards</b>	Acute aquatic toxicity	Category 1
<b>Label elements</b>		
Hazard pictograms		
Signal word	Danger	
Hazard statements	Harmful if swallowed. Causes severe skin burns and serious eye damage. Very toxic to aquatic life.	
<b>Precautionary statements</b>		
Prevention	Wash skin thoroughly after handling. Do not eat, drink, or smoke when using this product. Do not breathe dust or mists. Wear protective gloves/protective clothing/eye protection/face protection if contact is likely to occur. Avoid release into the environment.	
Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a physician or poison control center. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center if you feel unwell. IF ON SKIN (OR HAIR): Immediately take off all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a physician or poison control center. Collect spillage.	
Storage	Store locked up. Keep tightly capped. Store out of direct sunlight between 36°F–85°F.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
<b>Hazards not otherwise classified</b>	Not applicable	

## SECTION 3: Composition/Information on Ingredients

<b>Mixture</b>			
<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>% w/w</b>
Water	Dihydrogen oxide	7732-18-5	45-70
Ammonium hydroxide	Ammonia water	1336-21-6	20-30
Ammonium chloride	Salmiac	12125-02-9	5-10

Ammonium sulfide	Not applicable	12135-76-1	0.1-1
Non-hazardous components or below reportable levels	Not applicable	Not applicable	<3

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

## SECTION 4: First-Aid Measures

### If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

### If swallowed

Rinse mouth. Give large quantities of water. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Immediately call a physician.

### Most important symptoms and effects, both acute and delayed

Direct skin or eye contact may cause corrosive burns. Symptoms may include pain, redness or swelling. Scarring or permanent damage, including blindness, could result. Inhalation may cause severe respiratory irritation, such as coughing and wheezing. Inhalation could result in pulmonary edema, symptoms—chest pain, shortness of breath—may be delayed. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus, and possibly the digestive tract. Symptoms may include abdominal pain, vomiting, burns, perforations, and bleeding.

Refer to section 11 of the SDS for delayed and immediate effects and chronic effects from short- and long-term exposure.

### Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

### General information

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

## SECTION 5: Firefighting Measures

### Extinguishing media

Suitable extinguishing media Water fog, foam, dry chemical powder, carbon dioxide (CO<sub>2</sub>).

Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### Specific hazards arising from the substance or mixture

Fire hazard Not flammable

Explosion hazard Not explosive

Reactivity Hazardous reactions will not occur under normal conditions.

Hazardous combustion products Ammonia, hydrogen chloride, nitrogen oxides, sodium oxides, sulfur oxides. During fire, gases hazardous to health may be formed, including toxic hydrogen sulfide gas.

### Advice for firefighters

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.

Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Other information Refer to section 9 of the SDS for flammability properties.

## SECTION 6: Accidental Release Measures

### Personal precautions, protective equipment, and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe dust/fumes/gas/mists/vapors/spray. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

### Environmental precautions

Avoid discharge into drains, watercourses, or onto the ground.

### Methods and material for containment and cleaning up

Ventilate the area. Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of large spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

**SECTION 7: Handling and Storage****Precautions for safe handling**

Do not breathe dust/fumes/gas/mists/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

**Conditions for safe storage, including any incompatibilities**

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS). Store locked up.

**SECTION 8: Exposure Controls/Personal Protection****Occupational exposure limits****US ACGIH Threshold Limit Values**

<u>Components</u>	<u>Type</u>	<u>Value</u>
Ammonia (7664-41-7)	TWA	25 ppm (18 mg/m <sup>3</sup> )
Ammonia (7664-41-7)	STEL	35 ppm (27 mg/m <sup>3</sup> )

**US NIOSH: Pocket Guide to Chemical Hazards**

<u>Components</u>	<u>Type</u>	<u>Value</u>
Ammonia (7664-41-7)	TWA	25 ppm (18 mg/m <sup>3</sup> )
Ammonia (7664-41-7)	STEL	35 ppm (27 mg/m <sup>3</sup> )
Ammonia (7664-41-7)	IDLH	300 ppm (210 mg/m <sup>3</sup> )

**US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<u>Components</u>	<u>Type</u>	<u>Value</u>
Ammonia (7664-41-7)	TWA	50 ppm (35 mg/m <sup>3</sup> )

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Exposure controls**

Appropriate engineering controls      Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

**Personal protective equipment**

Eye/face protection      Wear appropriate safety glasses with side shields (or goggles) if contact is likely to occur.  
 Skin protection      Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.  
 Body protection      Wear appropriate protective clothing if contact is likely to occur  
 Respiratory protection      In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

**SECTION 9: Physical and Chemical Properties****Information on basic physical and chemical properties**

Physical state	Liquid
Form	Liquid
Color	Clear, colorless to yellow
Odor	Pungent, sulfur/ammonia odor
Odor threshold	No data available
pH	10.5
Evaporation rate	No data available
Melting point/freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	Not applicable
Auto-ignition temperature	No data available

Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	0.96 g/mL at 72°F (22°C)
Solubility	Miscible
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing

## SECTION 10: Stability and Reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions of use, storage, and transport.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Strong acids. Strong oxidizing agents. Halogens, nitrates, metals, and metal compounds.
<b>Hazardous decomposition products</b>	No hazardous decomposition products known.

## SECTION 11: Toxicological Information

### Information on likely routes of exposure

Inhalation	Avoid inhalation of this product. Use in a well-ventilated area. Substance can be absorbed into the body by inhalation of its aerosol or vapor.
Skin contact	Protect exposed skin from contact. Use caution to avoid splashes.
Eye contact	Avoid close eye contact; Use caution to avoid splashes. Wear eye protection.
Ingestion	Avoid accidental ingestion by observing good hygiene practices. Wash hands thoroughly after handling this product.

### Symptoms related to the physical, chemical, and toxicological characteristics

This product may be harmful if swallowed. Corrosive skin/eye damage may occur.  
Refer to section 4 of the SDS for most important symptoms and effects.

### Delayed and immediate effects and chronic effects from short- and long-term exposure

#### Acute toxicity

This product is classified as an acute toxicity hazard. Acute toxicity estimate (ATE) for the mixture has been calculated based on chapter 3 of GHS.  
0% of the mixture consists of ingredient(s) with unknown acute oral toxicity.

#### Product acute toxicity estimate (ATE)

<b>ATEmix (Oral)</b>	1065 mg/kg
<b>ATEmix (Dermal)</b>	No data available
<b>ATEmix (Inhalation)</b>	No data available

<b>Component(s)</b>	<b>Species</b>	<b>Acute toxicity data</b>
Ammonium chloride (CAS 12125-02-9)		
LD50 (Oral)	Rat	1650 mg/kg (Source: NIOSH)
LD50 (Dermal)	Not applicable	No data available
LC50 (Inhalation)	Not applicable	No data available
Ammonium hydroxide (CAS 1336-21-6)		
LD50 (Oral)	Rat	350 mg/kg (Source: NIOSH)
LD50 (Dermal)	Not applicable	No data available
LC50 (Inhalation)	Not applicable	No data available
Ammonium sulfide (CAS 12135-76-1)		

LD50 (Oral)	Rat	168 mg/kg (Source: ProQuest)
LD50 (Dermal)	Not applicable	No data available
LC50 (Inhalation)	Not applicable	No data available
<b>Skin corrosion/irritation</b>	Causes severe skin burns	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage	
<b>Respiratory sensitization</b>	No data available	
<b>Skin sensitization</b>	No data available	
<b>Germ cell mutagenicity</b>	No data available	
<b>Carcinogenicity</b>		
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Not listed		
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)</b>		
Not regulated		
<b>US National Toxicology Program (NTP) Report on Carcinogens</b>		
Not listed		
<b>Reproductive toxicity</b>	No data available	
<b>Specific target organ toxicity (single exposure)</b>	No data available	
<b>Specific target organ toxicity (repeated exposure)</b>	No data available	
<b>Aspiration hazard</b>	No data available	

## SECTION 12: Ecological Information

<b>Ecotoxicity</b>	This product is classified as environmentally hazardous.	
<b>Ammonium chloride (CAS 12125-02-9)</b>		
Rainbow trout	96hr LC50 = 0.42 – 0.56 mg/L	
American lobster	48hr EC50 = 0.237 – 0.288 mg/L	
<b>Ammonium hydroxide (CAS 1336-21-6)</b>		
Fathead minnow	96hr LC50 = 8.2 mg/L	
Water flea	48hr EC50 = 0.66 mg/L	
<b>Ammonium sulfide (CAS 12135-76-1)</b>		
Carp	48hr LC50 = 4.4 – 5.9 mg/L	
<b>Persistence and degradability</b>	No data available	
<b>Bioaccumulative potential</b>	No data available	
<b>Mobility in soil</b>	No data available	
<b>Other adverse effects</b>	Large or frequent spills can have a harmful or damaging effect on the environment.	

## SECTION 13: Disposal Considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport Information

<b>DOT</b>	
<b>UN number</b>	2672
<b>UN Proper shipping name</b>	Ammonia solution, 10-35%
<b>Reportable Quantity</b>	1000 lbs, Ammonium hydroxide
<b>Class (Subsidiary risk)</b>	8
<b>Label(s)</b>	8
<b>Packing group</b>	III
<b>Special provisions</b>	336, IB3, IP8, T7, TP2

Packaging exceptions 154  
 Packaging, non-bulk 203

**IATA**

UN number 2672  
 UN Proper shipping name Ammonia solution  
 Class (Subsidiary risk) 8  
 Packing group III  
 Special provisions A64, A803

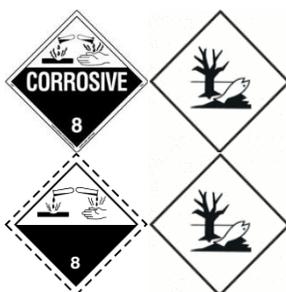
**IMDG**

UN number 2672  
 UN Proper shipping name Ammonia solution  
 Class (Subsidiary risk) 8  
 Packing group III  
 Environmental hazards  
 Marine pollutant Yes  
 Special provisions None  
 EmS F-A, S-B

**Special precautions for user** Read safety instructions, SDS, and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.

**DOT hazard pictograms**



**IATA/IMDG hazard pictograms**



**SECTION 15: Regulatory Information**

**US federal regulations**

**CERCLA Hazardous Substance (40 CFR 302.4)**

<u>Chemical name</u>	<u>CAS number</u>	<u>Reportable Quantity</u>
Ammonium chloride	12125-02-9	5000 lbs
Ammonium hydroxide	1336-21-6	1000 lbs
Ammonium sulfide	12135-76-1	100 lbs

**SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)**

Not regulated

**SARA 304 Emergency Release Notification**

Not regulated

**SARA 311/312 Hazardous Chemical**

<u>Chemical name</u>	<u>CAS number</u>
Ammonium chloride	12125-02-9
Ammonium hydroxide	1336-21-6
Ammonium sulfide	12135-76-1

**SARA 313 (TRI reporting)**

<u>Chemical name</u>	<u>CAS number</u>
Ammonium hydroxide	1336-21-6

**TSCA Section 8(b) Chemical Inventory**

All components are on the U.S. EPA TSCA Inventory list.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)**

Not regulated

**Safe Drinking Water Act (SDWA)**

Not regulated

**US state regulations**

**California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**Massachusetts Right-to-Know Act**

<u>Chemical name</u>	<u>CAS number</u>
Ammonium chloride	12125-02-9
Ammonium hydroxide	1336-21-6
Ammonium sulfide	12135-76-1

**New Jersey Worker and Community Right-to-Know Act**

<u>Chemical name</u>	<u>CAS number</u>
Ammonium chloride	12125-02-9
Ammonium hydroxide	1336-21-6
Ammonium sulfide	12135-76-1

**Pennsylvania Worker and Community Right-to-Know Act**

<u>Chemical name</u>	<u>CAS number</u>
Ammonium chloride	12125-02-9
Ammonium hydroxide	1336-21-6
Ammonium sulfide	12135-76-1

**Rhode Island Right-to-Know Act**

<u>Chemical name</u>	<u>CAS number</u>
Ammonium chloride	12125-02-9
Ammonium hydroxide	1336-21-6
Ammonium sulfide	12135-76-1

**SECTION 16: Other Information**

**NFPA Rating**

Health hazard	3
Fire hazard	0
Reactivity	0
Specific	N/A

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License granted to make unlimited paper copies for internal use only. This Safety Data Sheet may not be altered in any way without the expressed knowledge and permission of Taylor Technologies, Inc. The information contained in this sheet is based on lab experience and the most current data available.

**Issue date:**

May 2015

**Revision date:**

06/25/2021

**Revision information:**

This document embodies significant change(s) that may impact classification, safe handling, or health information for the associated product(s). The information contained herein should be reviewed in its entirety before handling material.

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Fluoride Masking Agent
Product number	R-0805; R-0805-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Local: (410) 472-4340 – 8am – 5pm EST Toll-free: (800) 837-8548 – 8am – 5pm EST
<b>Emergency phone number</b>	
CHEMTREC, United States	1-800-424-9300 – 24-hour service
CHEMTREC, International	+1 703-741-5970 – 24-hour service

## SECTION 2: Hazard(s) identification

<b>Physical hazards</b>	Not applicable	
<b>Health hazards</b>	Carcinogenicity	Category 1A
	Sensitization, skin	Category 1
	Specific target organ toxicity, repeat exposure	Category 1
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.	

### Label elements

Hazard pictograms



Signal word	Danger
Hazard statements	May cause cancer. May cause allergic skin reaction. Causes damage to organs through prolonged or repeated exposure.
Precautionary statements	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection if contact is likely to occur. Contaminated work clothing must not be allowed out of the workplace. Do not breathe dust/fumes/gas/mists/vapors/spray. Wash skin thoroughly after handling. Do not eat, drink, or smoke when using this product.
Response	IF EXPOSED OR CONCERNED: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. IF SKIN IRRITATION OR RASH OCCURS: Get medical advice/attention. Wash contaminated clothing before reuse. Get medical advice/attention if you feel unwell.
Storage	Store out of direct sunlight between 36°F–85°F. Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazards not otherwise classified</b>	Not applicable

## SECTION 3: Composition/information on ingredients

### Mixture

Chemical name	Common name and synonyms	CAS number	% w/w
Water	Dihydrogen oxide	7732-18-5	98.0
Beryllium sulfate tetrahydrate	Beryllium sulphate tetrahydrate	7787-56-6	2.0

## SECTION 4: First-aid measures

### If inhaled

Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed. Use pocket mask equipped with a one-way valve or other proper respiratory medical device. Do not use mouth-to-mouth if individual inhaled the substance.

### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical attention if irritation develops.

### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

### If swallowed

Immediately call a physician or poison control center. Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Give oxygen or artificial respiration if needed. Use pocket mask equipped with a one-way valve or other proper respiratory medical device. Do not use mouth-to-mouth if individual ingested the substance.

### Most important symptoms and effects, both acute and delayed

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

### Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

### General information

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

## SECTION 5: Firefighting measures

### Extinguishing media

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### Specific hazards arising from the substance or mixture

Fire hazard Not flammable

Explosion hazard Not explosive

Reactivity Hazardous reactions will not occur under normal conditions.

Hazardous combustion products Hazardous gases, sulfur oxides. Other irritating fumes and smoke.

### Advice for firefighters

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.

Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Other information Refer to section 9 of the SDS for flammability properties.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment, and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe mists or vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

### Environmental precautions

Avoid discharge into drains, watercourses, or onto the ground.

### Methods and material for containment and cleaning up

Ventilate the area. Stop leak if it can be done without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material where this is possible. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water to remove residual contamination. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

### Reference to other sections

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

## SECTION 7: Handling and storage

### Personal precautions, protective equipment, and emergency procedures

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mists or vapors. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

### Conditions for safe storage, including any incompatibilities

Store out of direct sunlight between 36°F–85°F. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store away from incompatible materials (refer to section 10 of the SDS).

## SECTION 8: Exposure controls/personal protection

### Occupational exposure limits

#### US ACGIH Threshold Limit Values

Components	Type	Value
Beryllium sulfate tetrahydrate (CAS 7787-56-6)	TWA	0.05 µg/m <sup>3</sup> (skin)

#### US NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Beryllium sulfate tetrahydrate (CAS 7787-56-6)	Ceiling	0.5 µg/m <sup>3</sup>

#### US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Beryllium sulfate tetrahydrate (CAS 7787-56-6)	TWA	2 µg/m <sup>3</sup>
Beryllium sulfate tetrahydrate (CAS 7787-56-6)	Ceiling	5 µg/m <sup>3</sup>
Beryllium sulfate tetrahydrate (CAS 7787-56-6)	Peak (30 min of an 8-hour shift)	25 µg/m <sup>3</sup>

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

#### Personal protective equipment

Eye/face protection	Wear appropriate chemical safety goggles if contact is likely to occur.
Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Clear, colorless
Odor	Odorless
Odor threshold	Not applicable
pH	2.8
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available

Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## SECTION 10: Stability and reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products under normal use.

## SECTION 11: Toxicological information

### Information on toxicological effects

Likely routes of exposure are **skin/eye contact and ingestion**.

<b>Most important symptoms/effects, acute and delayed</b>	Direct skin contact may cause irritation. Symptoms may include redness and itching.
	Direct eye contact may cause serious irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
	Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties.
	Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

May cause cancer.

<b>Acute toxicity</b>	This product is not classified as an acute toxicity hazard.
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<b>Skin corrosion/irritation</b>	No data available
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<b>Serious eye damage/eye irritation</b>	No data available
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<b>Respiratory sensitization</b>	No data available
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<b>Skin sensitization</b>	May cause allergic skin reaction
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<b>Germ cell mutagenicity</b>	No data available
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<b>Carcinogenicity</b>	May cause cancer
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### IARC Monographs. Overall Evaluation of Carcinogenicity

Beryllium and Beryllium Compounds, Group 1; Carcinogenic to humans

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Beryllium and Beryllium Compounds; Cancer

### US National Toxicology Program (NTP) Report on Carcinogens

Beryllium and Beryllium Compounds; Known to be a human carcinogen

<b>Reproductive toxicity</b>	No data available
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<b>Specific target organ toxicity (single exposure)</b>	No data available
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**Specific target organ toxicity (repeated exposure)** Causes damage to organs through prolonged or repeated exposure

**Aspiration hazard** No data available

## SECTION 12: Ecological information

**Ecotoxicity** This product is not classified as environmentally hazardous.

**Persistence and degradability** No data available

**Bioaccumulative potential** No data available

**Mobility in soil** No data available

**Other adverse effects** Large or frequent spills can have a harmful or damaging effect on the environment.

## SECTION 13: Disposal considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport information

**DOT** Not regulated as dangerous goods

**IATA** Not regulated as dangerous goods

**IMDG** Not regulated as dangerous goods

## SECTION 15: Regulatory information

### US federal regulations

#### CERCLA Hazardous Substance (40 CFR 302.4)

<u>Chemical name</u>	<u>CAS number</u>	<u>Reportable Quantity</u>
Beryllium sulfate tetrahydrate	7787-56-6	10 lbs

#### SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

#### SARA 304 Emergency Release Notification

Not regulated

#### SARA 311/312 Hazardous Chemical

<u>Chemical name</u>	<u>CAS number</u>
Beryllium sulfate tetrahydrate	7787-56-6

#### SARA 313 (TRI reporting)

<u>Chemical name</u>	<u>CAS number</u>
Beryllium sulfate tetrahydrate	7787-56-6

#### TSCA Section 8(b) Chemical Inventory

All components are on the U.S. EPA TSCA Inventory list.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

### Other federal regulations

#### Clean Air Act (CAA) Section 112(b) Hazardous Air Pollutants (HAPs)

<u>Chemical name</u>	<u>CAS number</u>
Beryllium sulfate tetrahydrate	7787-56-6

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

#### Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)

<u>Chemical name</u>	<u>CAS number</u>
Beryllium sulfate tetrahydrate	7787-56-6

#### Safe Drinking Water Act (SDWA)

<u>Chemical name</u>	<u>CAS number</u>
Beryllium sulfate tetrahydrate	7787-56-6

## US state regulations

### California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

<u>Chemical name</u>	<u>CAS number</u>
Beryllium sulfate tetrahydrate	7787-56-6

**WARNING:** This product can expose you to Beryllium sulfate tetrahydrate (beryllium compound), which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### Massachusetts Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Beryllium sulfate tetrahydrate	7787-56-6

### New Jersey Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Beryllium sulfate tetrahydrate	7787-56-6

### Pennsylvania Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Beryllium sulfate tetrahydrate	7787-56-6

### Rhode Island Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Beryllium sulfate tetrahydrate	7787-56-6

## SECTION 16: Other information

### NFPA Rating

Health hazard	3
Fire hazard	0
Reactivity	0
Specific	N/A

### Disclaimer

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### Issue date:

May 2015

### Revision date:

03/02/2021

### Revision information:

Identification: Emergency phone number

Composition/information on ingredients: %w/w



# SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Hardness Indicator Powder
Product number	R-0620; R-0620B; R-0620LB; R-0620-PL; R-0620B-PL; R-0620LB-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) Identification

<b>Physical hazards</b>	Not applicable
<b>Health hazards</b>	Not applicable
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
<b>Label elements</b>	
Hazard pictograms	Not applicable
Signal word	Not applicable
Hazard statements	Not applicable
Precautionary statements	
Prevention	Avoid contact with skin, eyes, or clothing. For contact with skin or eyes, flush 20 minutes with water. If ingested, contact physician or local poison control center. Treat symptoms as needed.
Response	This reagent is not defined as a hazardous chemical per OSHA's Hazard Communication Standard 2012; however, use care when handling.
Storage	Keep tightly capped. Store out of direct sunlight between 36°F–85°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazards not otherwise classified</b>	Not applicable

## SECTION 3: Composition/Information on Ingredients

Mixture			
Chemical name	Common name and synonyms	CAS number	% w/w
Sucrose	Sugar	57-50-1	80-100
Nonhazardous and other components below reportable levels	Not applicable	Not applicable	0.1–1

## SECTION 4: First-Aid Measures

### If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

### If swallowed

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice/attention.

**Most important symptoms and effects, both acute and delayed**

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

**Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**SECTION 5: Firefighting Measures****Extinguishing media**

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.  
 Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Specific hazards arising from the substance or mixture**

Fire hazard Not flammable  
 Explosion hazard Not explosive  
 Reactivity Hazardous reactions will not occur under normal conditions.  
 Hazardous combustion products Carbon oxides, sodium oxides. Other irritating fumes and smoke.

**Advice for firefighters**

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.  
 Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.  
 Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.  
 Other information Refer to section 9 of the SDS for flammability properties.

**SECTION 6: Accidental Release Measures****Personal precautions, protective equipment, and emergency procedures**

Wear appropriate protective equipment and clothing during cleanup. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

**Environmental precautions**

Avoid discharge into drains, watercourses, or onto the ground.

**Methods and material for containment and cleaning up**

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

**SECTION 7: Handling and Storage****Personal precautions, protective equipment, and emergency procedures**

Do not breathe the mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

**Conditions for safe storage, including any incompatibilities**

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

**SECTION 8: Exposure Controls/Personal Protection****Occupational exposure limits****US ACGIH Threshold Limit Values**

Components	Type	Value
Sucrose (CAS 57-50-1)	TWA	10 mg/m <sup>3</sup>

**US NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
Sucrose (CAS 57-50-1)	TWA	10 mg/m <sup>3</sup> (Total)
Sucrose (CAS 57-50-1)	TWA	5 mg/m <sup>3</sup> (Resp)

**US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<b>Components</b>	<b>Type</b>	<b>Value</b>
Sucrose (CAS 57-50-1)	TWA	15 mg/m <sup>3</sup> (Total)
Sucrose (CAS 57-50-1)	TWA	5 mg/m <sup>3</sup> (Resp)

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Exposure controls**

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

## Personal protective equipment

Eye/face protection	Wear appropriate chemical safety goggles if contact is likely to occur.
Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

**SECTION 9: Physical and Chemical Properties****Information on basic physical and chemical properties**

Physical state	Solid
Form	Powder
Color	Purple
Odor	Odorless
Odor threshold	No data available
pH	No data available
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## SECTION 10: Stability and Reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Nitric acid, oxidizers, and sulfuric acid.
<b>Hazardous decomposition products</b>	Hazardous reactions will not occur under normal conditions.

## SECTION 11: Toxicological Information

### Information on toxicological effects

Likely routes of exposure are **skin/eye contact and ingestion**.

<b>Most important symptoms/effects, acute and delayed</b>	Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching. Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.
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**Acute toxicity** This product is not classified as an acute toxicity hazard.

**Skin corrosion/irritation** No data available

**Serious eye damage/eye irritation** No data available

**Respiratory sensitization** No data available

**Skin sensitization** No data available

**Germ cell mutagenicity** No data available

### Carcinogenicity

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Not regulated

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

#### US National Toxicology Program (NTP) Report on Carcinogens

Not regulated

**Reproductive toxicity** No data available

**Specific target organ toxicity (single exposure)** No data available

**Specific target organ toxicity (repeated exposure)** No data available

**Aspiration hazard** No data available

## SECTION 12: Ecological Information

<b>Ecotoxicity</b>	This product is not classified as environmentally hazardous.
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	Large or frequent spills can have a harmful or damaging effect on the environment.

## SECTION 13: Disposal Considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport Information

DOT	Not regulated as dangerous goods
IATA	Not regulated as dangerous goods
IMDG	Not regulated as dangerous goods

## SECTION 15: Regulatory Information

### US federal regulations

#### CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

#### SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

#### SARA 304 Emergency Release Notification

Not regulated

#### SARA 311/312 Hazardous Chemical

Not regulated

#### SARA 313 (TRI reporting)

Not regulated

#### TSCA Section 8(b) Chemical Inventory

All components are on the U.S. EPA TSCA Inventory list.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)

Not regulated

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

#### Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)

Not regulated

#### Safe Drinking Water Act (SDWA)

Not regulated

### US state regulations

#### California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

Not regulated

#### Massachusetts Right-to-Know Act

Not regulated

#### New Jersey Worker and Community Right-to-Know Act

Not regulated

#### Pennsylvania Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Sucrose	57-50-1

#### Rhode Island Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Sucrose	57-50-1

## SECTION 16: Other Information

### NFPA Rating

Health hazard	0
Fire hazard	0
Reactivity	0
Specific	N/A

### Disclaimer

The information in the Safety Data Sheet is offered for your consideration and guidance for safe handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

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### Issue date:

May 2015

### Last revisions

July 2019



# SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Hardness Reagent
Product number	R-0683; R-0683-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) Identification

<b>Physical hazards</b>	Not applicable
<b>Health hazards</b>	Not applicable
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
<b>Label elements</b>	
Hazard pictograms	Not applicable
Signal word	Not applicable
Hazard statements	Not applicable
Precautionary statements	
Prevention	Avoid contact with skin, eyes, or clothing. For contact with skin or eyes, flush 20 minutes with water. If ingested, contact physician or local poison control center. Treat symptoms as needed.
Response	This reagent is not defined as a hazardous chemical per OSHA's Hazard Communication Standard 2012; however, use care when handling.
Storage	Keep tightly capped. Store out of direct sunlight between 36°F–85°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazards not otherwise classified</b>	Not applicable

## SECTION 3: Composition/Information on Ingredients

<b>Mixture</b>			
<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>% w/w</b>
Water	Dihydrogen oxide	7732-18-5	80-100
Nonhazardous and other components below reportable levels	Not applicable	Not applicable	1-5

## SECTION 4: First-Aid Measures

### If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

### If swallowed

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice/attention.

**Most important symptoms and effects, both acute and delayed**

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

**Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**SECTION 5: Firefighting Measures****Extinguishing media**

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.  
 Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Specific hazards arising from the substance or mixture**

Fire hazard Not flammable  
 Explosion hazard Not explosive  
 Reactivity Hazardous reactions will not occur under normal conditions.  
 Hazardous combustion products Carbon oxides, hydrogen chloride gas; magnesium oxides, nitrogen oxides, sodium oxides. Other irritating fumes and smoke.

**Advice for firefighters**

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.  
 Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.  
 Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.  
 Other information Refer to section 9 of the SDS for flammability properties.

**SECTION 6: Accidental Release Measures****Personal precautions, protective equipment, and emergency procedures**

Wear appropriate protective equipment and clothing during cleanup. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

**Environmental precautions**

Avoid discharge into drains, watercourses, or onto the ground.

**Methods and material for containment and cleaning up**

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

**SECTION 7: Handling and Storage****Personal precautions, protective equipment, and emergency procedures**

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

**Conditions for safe storage, including any incompatibilities**

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

**SECTION 8: Exposure Controls/Personal Protection****Occupational exposure limits****US ACGIH Threshold Limit Values**

Not regulated

**US NIOSH: Pocket Guide to Chemical Hazards**

Not regulated

**US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Not regulated

## Biological limit values

No biological exposure limits noted for the ingredient(s).

## Exposure controls

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.
Personal protective equipment	
Eye/face protection	Wear appropriate chemical safety goggles if contact is likely to occur.
Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

## SECTION 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Clear, colorless or nearly colorless
Odor	Odorless
Odor threshold	No data available
pH	8.1
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## SECTION 10: Stability and Reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Oxidizing agents and metals.
<b>Hazardous decomposition products</b>	Hazardous reactions will not occur under normal conditions.

## SECTION 11: Toxicological Information

### Information on toxicological effects

Likely routes of exposure are skin/eye contact and ingestion.

#### Most important symptoms/effects, acute and delayed

Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching.

Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

#### Acute toxicity

This product is not classified as an acute toxicity hazard.

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory sensitization

No data available

#### Skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

##### IARC Monographs. Overall Evaluation of Carcinogenicity

Not regulated

##### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

##### US National Toxicology Program (NTP) Report on Carcinogens

Not regulated

#### Reproductive toxicity

No data available

#### Specific target organ toxicity (single exposure)

No data available

#### Specific target organ toxicity (repeated exposure)

No data available

#### Aspiration hazard

No data available

## SECTION 12: Ecological Information

#### Ecotoxicity

This product is not classified as environmentally hazardous.

#### Persistence and degradability

No data available

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

Large or frequent spills can have a harmful or damaging effect on the environment.

## SECTION 13: Disposal Considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport Information

#### DOT

Not regulated as dangerous goods

#### IATA

Not regulated as dangerous goods

#### IMDG

Not regulated as dangerous goods

## SECTION 15: Regulatory Information

#### US federal regulations

##### CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

##### SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

**SARA 304 Emergency Release Notification**

Not regulated

**SARA 311/312 Hazardous Chemical**

Not regulated

**SARA 313 (TRI reporting)**

Not regulated

**TSCA Section 8(b) Chemical Inventory**

All components are on the U.S. EPA TSCA Inventory list.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)**

Not regulated

**Safe Drinking Water Act (SDWA)**

Not regulated

**US state regulations****California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)**

Not regulated

**Massachusetts Right-to-Know Act**

Not regulated

**New Jersey Worker and Community Right-to-Know Act**

Not regulated

**Pennsylvania Worker and Community Right-to-Know Act**

Not regulated

**Rhode Island Right-to-Know Act**

Not regulated

**SECTION 16: Other Information****NFPA Rating**

Health hazard	0
Fire hazard	0
Reactivity	0
Specific	N/A

**Disclaimer**

The information in the Safety Data Sheet is offered for your consideration and guidance for safe handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

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**Issue date:**

May 2015

**Last revisions**

July 2019



# SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Methyl Orange Indicator
Product number	R-0637; R-0637-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) Identification

<b>Physical hazards</b>	Not applicable
<b>Health hazards</b>	Not applicable
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
<b>Label elements</b>	
Hazard pictograms	Not applicable
Signal word	Not applicable
Hazard statements	Not applicable
Precautionary statements	
Prevention	Avoid contact with skin, eyes, or clothing. For contact with skin or eyes, flush 20 minutes with water. If ingested, contact physician or local poison control center. Treat symptoms as needed.
Response	This reagent is not defined as a hazardous chemical per OSHA's Hazard Communication Standard 2012; however, use care when handling.
Storage	Keep tightly capped. Store out of direct sunlight between 36°F–85°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazards not otherwise classified</b>	Not applicable

## SECTION 3: Composition/Information on Ingredients

<b>Mixture</b>			
<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>% w/w</b>
Water	Dihydrogen oxide	7732-18-5	80-100
Nonhazardous and other components below reportable levels	Not applicable	Not applicable	0.1–1

## SECTION 4: First-Aid Measures

### If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

### If swallowed

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice/attention.

**Most important symptoms and effects, both acute and delayed**

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

**Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**SECTION 5: Firefighting Measures****Extinguishing media**

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.  
Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Specific hazards arising from the substance or mixture**

Fire hazard Not flammable  
Explosion hazard Not explosive  
Reactivity Hazardous reactions will not occur under normal conditions.  
Hazardous combustion products Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides. Other irritating fumes and smoke.

**Advice for firefighters**

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.  
Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.  
Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.  
Other information Refer to section 9 of the SDS for flammability properties.

**SECTION 6: Accidental Release Measures****Personal precautions, protective equipment, and emergency procedures**

Wear appropriate protective equipment and clothing during cleanup. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

**Environmental precautions**

Avoid discharge into drains, watercourses, or onto the ground.

**Methods and material for containment and cleaning up**

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

**SECTION 7: Handling and Storage****Personal precautions, protective equipment, and emergency procedures**

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

**Conditions for safe storage, including any incompatibilities**

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

**SECTION 8: Exposure Controls/Personal Protection****Occupational exposure limits****US ACGIH Threshold Limit Values**

Not regulated

**US NIOSH: Pocket Guide to Chemical Hazards**

Not regulated

**US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Not regulated

## Biological limit values

No biological exposure limits noted for the ingredient(s).

## Exposure controls

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.
Personal protective equipment	
Eye/face protection	Wear appropriate chemical safety goggles if contact is likely to occur.
Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

## SECTION 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Clear, orange
Odor	No data available
Odor threshold	No data available
pH	No data available
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## SECTION 10: Stability and Reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Hazardous reactions will not occur under normal conditions.

## SECTION 11: Toxicological Information

### Information on toxicological effects

Likely routes of exposure are skin/eye contact and ingestion.

#### Most important symptoms/effects, acute and delayed

Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching.

Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

#### Acute toxicity

This product is not classified as an acute toxicity hazard.

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory sensitization

No data available

#### Skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

##### IARC Monographs. Overall Evaluation of Carcinogenicity

Not regulated

##### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

##### US National Toxicology Program (NTP) Report on Carcinogens

Not regulated

#### Reproductive toxicity

No data available

#### Specific target organ toxicity (single exposure)

No data available

#### Specific target organ toxicity (repeated exposure)

No data available

#### Aspiration hazard

No data available

## SECTION 12: Ecological Information

#### Ecotoxicity

This product is not classified as environmentally hazardous.

#### Persistence and degradability

No data available

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

Large or frequent spills can have a harmful or damaging effect on the environment.

## SECTION 13: Disposal Considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport Information

#### DOT

Not regulated as dangerous goods

#### IATA

Not regulated as dangerous goods

#### IMDG

Not regulated as dangerous goods

## SECTION 15: Regulatory Information

#### US federal regulations

##### CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

##### SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

##### SARA 304 Emergency Release Notification

Not regulated

**SARA 311/312 Hazardous Chemical**

Not regulated

**SARA 313 (TRI reporting)**

Not regulated

**TSCA Section 8(b) Chemical Inventory**

All components are on the U.S. EPA TSCA Inventory list.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)**

Not regulated

**Safe Drinking Water Act (SDWA)**

Not regulated

**US state regulations**

**California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)**

Not regulated

**Massachusetts Right-to-Know Act**

Not regulated

**New Jersey Worker and Community Right-to-Know Act**

Not regulated

**Pennsylvania Worker and Community Right-to-Know Act**

Not regulated

**Rhode Island Right-to-Know Act**

Not regulated

**SECTION 16: Other Information**

**NFPA Rating**

Health hazard	0
Fire hazard	0
Reactivity	0
Specific	N/A

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**Issue date:**

May 2015

**Last revisions**

December 2019

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Long Range Indicator
Product number	R-1003U; R-1003U-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 2
<b>Health hazards</b>	Eye damage/irritation	Category 2A
	Carcinogenicity	Category 1B
	Germ cell mutagenicity	Category 2
	Reproductive toxicity	Category 2
	Specific target organ toxicity, single exposure	Category 3
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.	

### Label elements

Hazard pictograms



Signal word	Danger
Hazard statements	Highly flammable liquid and vapor. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May cause cancer. Suspected of causing genetic defects. Suspected of damaging fertility or the unborn child.
Precautionary statements	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. -No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection if contact is likely to occur. Wash skin thoroughly after handling. Avoid breathing dust/fumes/gas/mists/vapors/spray. Use only outdoors or in a well-ventilated area.
Response	IF EXPOSED OR CONCERNED: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a physician or poison center if you feel unwell. IF ON SKIN (OR HAIR): Immediately take off all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. IF EYE IRRITATION PERSISTS: Get medical advice/attention. IN CASE OF FIRE: Use alcohol-resistant foam, carbon dioxide, dry chemical powder, or water fog to extinguish.
Storage	Store in well-ventilated place. Keep cool. Keep tightly capped. Store out of direct sunlight between 36°F-85°F. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazards not otherwise classified</b>	Not applicable

## SECTION 3: Composition/information on ingredients

<b>Mixture</b>			
<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>% w/w</b>
Water	Dihydrogen oxide	7732-18-5	15-40
Isopropyl alcohol	Isopropanol	67-63-0	60-80
Phenolphthalein	3,3-Bis(4-hydroxyphenyl)-1(3H)-isobenzofuranone	77-09-8	0.01-0.1
Nonhazardous and other components below reportable levels	Not applicable	Not applicable	0.1-1

## **SECTION 4: First-aid measures**

### **If inhaled**

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

### **In case of skin contact**

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

### **In case of eye contact**

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

### **If swallowed**

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice/attention.

### **Most important symptoms and effects, both acute and delayed**

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

### **Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

### **General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

## **SECTION 5: Firefighting measures**

### **Extinguishing media**

Suitable extinguishing media Alcohol-resistant foam, carbon dioxide, dry chemical powder, or water fog.

Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### **Specific hazards arising from the substance or mixture**

**Fire hazard** Flammable liquid and vapor. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can be electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential static discharge, use proper bonding and grounding procedures. This material may be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment). Vapors are heavier than air and may spread along floors.

**Explosion hazard** Vapors may form explosive mixtures with air. This material may be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment). Vapors are heavier than air and may spread along floors.

**Reactivity** Hazardous reactions will not occur under normal conditions.

**Hazardous combustion products** Carbon oxides, nitrogen oxides. Other irritating fumes and smoke.

### **Advice for firefighters**

**Precautionary measures** Exercise caution when fighting any chemical fire; hazardous fumes will be present.

**Firefighting equipment/instructions** Use water spray or fog for cooling exposed containers.

**Protection during firefighting** Do not enter fire area without proper protective equipment, including respiratory protection.

**Other information** Refer to section 9 of the SDS for flammability properties.

## **SECTION 6: Accidental release measures**

### **Personal precautions, protective equipment, and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe dust/fumes/gas/mists/vapors/spray. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should

be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

### Environmental precautions

Avoid discharge into drains, watercourses, or onto the ground.

### Methods and material for containment and cleaning up

Ventilate the contaminated area. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water to remove residual contamination. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

### Reference to other sections

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

## SECTION 7: Handling and storage

### Personal precautions, protective equipment, and emergency procedures

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Vapors may form explosive mixtures with air. Keep away from sources of ignition. NO SMOKING. Do not handle, store, or open near an open flame, sources of heat or sources of ignition. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe dust/fumes/gas/mists/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

### Conditions for safe storage, including any incompatibilities

Store in well-ventilated place. Keep cool. Keep tightly capped. Store out of direct sunlight between 36°F-85°F. Store away from incompatible materials (refer to section 10 of the SDS).

## SECTION 8: Exposure controls/personal protection

### Occupational exposure limits

#### US ACGIH Threshold Limit Values

Components	Type	Value
Isopropanol (CAS 67-63-0)	STEL	980 mg/m <sup>3</sup>
Isopropanol (CAS 67-63-0)	TWA	492 mg/m <sup>3</sup>

#### US NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Isopropanol (CAS 67-63-0)	ST	1225 mg/m <sup>3</sup>
Isopropanol (CAS 67-63-0)	TWA	980 mg/m <sup>3</sup>
Isopropanol (CAS 67-63-0)	IDLH	4920 mg/m <sup>3</sup>

#### US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Isopropanol (CAS 67-63-0)	PEL	980 mg/m <sup>3</sup>

### Biological limit values

#### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Isopropanol (CAS 67-63-0)	40 mg/L	Acetone	Urine	End of shift at end of workweek

### Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

#### Personal protective equipment

Eye/face protection Wear appropriate chemical safety goggles if contact is likely to occur.

Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Dark green
Odor	Alcohol
Odor threshold	90 mg/m <sup>3</sup>
pH	No data available
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	180.4°F (82.3°C)
Flash point	53°F (12°C) Closed cup
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Flammable
Upper Flammability Limit	UEL 12% v/v 200° F (93°C)
Lower Flammability Limit	LEL 2% v/v 200° F (93°C)
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	Moderately explosive when exposed to heat or flame.
Oxidizing properties	No data available

## SECTION 10: Stability and reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS.)
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Heat, sparks, open flames, and other ignition sources. Temperatures exceeding the flash point. Direct sunlight. Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Acetaldehyde, acids, chlorine, ethylene oxide, halogenated hydrocarbons, isocyanates, nitrites, organics, strong acids, strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products under normal conditions.

## SECTION 11: Toxicological information

### Information on toxicological effects

Likely routes of exposure are skin/eye contact and ingestion.

<b>Most important symptoms/effects, acute and delayed</b>	Direct skin contact may cause irritation. Symptoms may include redness and itching. Direct eye contact may cause serious irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Inhalation of mists can cause respiratory irritation, drowsiness, dizziness. Symptoms may
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include coughing and breathing difficulties.  
Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.  
May cause cancer.  
Suspected of causing genetic defects.  
Suspected of damaging fertility or the unborn child.

<b>Acute toxicity</b>	This product is not classified as an acute toxicity hazard.
<b>Skin corrosion/irritation</b>	No data available
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory sensitization</b>	No data available
<b>Skin sensitization</b>	No data available
<b>Germ cell mutagenicity</b>	No data available

#### **Carcinogenicity**

##### **IARC Monographs. Overall Evaluation of Carcinogenicity**

Phenolphthalein; Group 2B-Possibly carcinogenic to humans

##### **OSHA 13 Carcinogens**

Not regulated

##### **US National Toxicology Program (NTP) Report on Carcinogens**

Phenolphthalein; Reasonably anticipated to be a human carcinogen

<b>Reproductive toxicity</b>	Suspected of damaging fertility or the unborn child
<b>Specific target organ toxicity (single exposure)</b>	May cause drowsiness or dizziness. May cause respiratory irritation.
<b>Specific target organ toxicity (repeated exposure)</b>	No data available
<b>Aspiration hazard</b>	No data available

### **SECTION 12: Ecological information**

<b>Ecotoxicity</b>	This product is not classified as environmentally hazardous.
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	Large or frequent spills can have a harmful or damaging effect on the environment.

### **SECTION 13: Disposal considerations**

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

### **SECTION 14: Transport information**

#### **DOT**

<b>UN number</b>	1219
<b>UN Proper shipping name</b>	Isopropyl alcohol solution
<b>Reportable Quantity</b>	None
<b>Class (Subsidiary risk)</b>	3
<b>Label(s)</b>	3
<b>Packing group</b>	II
<b>Special provisions</b>	IB2, T4, TP1
<b>Packaging exceptions</b>	4b, 150
<b>Packaging, non-bulk</b>	202

#### **IATA**

<b>UN number</b>	1219
<b>UN Proper shipping name</b>	Isopropyl alcohol solution
<b>Class (Subsidiary risk)</b>	3
<b>Packing group</b>	II

<b>Special provisions</b>	A180
<b>IMDG</b>	
<b>UN number</b>	1219
<b>UN Proper shipping name</b>	Isopropyl alcohol solution
<b>Class (Subsidiary risk)</b>	3
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No
<b>Special provisions</b>	None
<b>EmS</b>	F-E, S-D
<b>Special precautions for user</b>	Read safety instructions, SDS, and emergency procedures before handling.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	This substance/mixture is not intended to be transported in bulk.

**DOT hazard pictograms**



**IATA; IMDG hazard pictograms**



## SECTION 15: Regulatory information

### US federal regulations

**CERCLA Hazardous Substance (40 CFR 302.4)**

Not regulated

**SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)**

Not regulated

**SARA 304 Emergency Release Notification**

Not regulated

**SARA 311/312 Hazardous Chemical**

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0
Phenolphthalein	77-09-8

**SARA 313 (TRI reporting)**

<u>Chemical name</u>	<u>CAS number</u>
Phenolphthalein	77-09-8

**TSCA Section 8(b) Chemical Inventory**

All components are on the U.S. EPA TSCA Inventory list.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

### Other federal regulations

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)**

Not regulated

**Safe Drinking Water Act (SDWA)**

Not regulated

## US state regulations

### California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

<u>Chemical name</u>	<u>CAS number</u>
Phenolphthalein	77-09-8

**WARNING:** This product can expose you to phenolphthalein, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

### Massachusetts Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Phenolphthalein	77-09-8

### New Jersey Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0
Phenolphthalein	77-09-8

### Pennsylvania Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0

### Rhode Island Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0

## SECTION 16: Other information

### NFPA Rating

Health hazard	2
Fire hazard	3
Reactivity	1
Specific	N/A

### Disclaimer

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### Issue date:

May 2015

### Last revisions

August 2018

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Phenolphthalein Indicator
Product number	R-0638; R-0638-PL; R-0638BR; R-0638BR-PL; R-0638G; R-0638G-PL; R-0638O; R-0638O-PL; R-0638W; R-7638
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 2
<b>Health hazards</b>	Eye damage/irritation	Category 2A
	Carcinogenicity	Category 1B
	Germ cell mutagenicity	Category 2
	Reproductive toxicity	Category 2
	Specific target organ toxicity, single exposure	Category 3
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.	
<b>Label elements</b>		
Hazard pictograms		
Signal word	Danger	
Hazard statements	Highly flammable liquid and vapor. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May cause cancer. Suspected of causing genetic defects. Suspected of damaging fertility or the unborn child.	
<b>Precautionary statements</b>		
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/eye protection/face protection if contact is likely to occur. Wash skin thoroughly after handling. Avoid breathing dust/fumes/gas/mists/vapors/spray. Use only outdoors or in a well-ventilated area.	
Response	IF EXPOSED OR CONCERNED: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a physician or poison center if you feel unwell. IF ON SKIN (OR HAIR): Immediately take off all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. IF EYE IRRITATION PERSISTS: Get medical advice/attention. IN CASE OF FIRE: Use alcohol-resistant foam, carbon dioxide, dry chemical powder, or water fog to extinguish.	
Storage	Store in well-ventilated place. Keep cool. Keep tightly capped. Store out of direct sunlight between 36°F-85°F. Store locked up.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
<b>Hazards not otherwise classified</b>	Not applicable	

### SECTION 3: Composition/information on ingredients

Mixture			
Chemical name	Common name and synonyms	CAS number	% w/w
Water	Dihydrogen oxide	7732-18-5	45-70
Isopropyl alcohol	Isopropanol	67-63-0	30-60
Phenolphthalein	3,3-Bis(4-hydroxyphenyl)-1(3H)-isobenzofuranone	77-09-8	0.1-1

### SECTION 4: First-aid measures

#### If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

#### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

#### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

#### If swallowed

Immediately call a physician or poison control center. Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice/attention.

#### Most important symptoms and effects, both acute and delayed

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

#### Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

#### General information

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### SECTION 5: Firefighting measures

#### Extinguishing media

Suitable extinguishing media Alcohol-resistant foam, carbon dioxide, dry chemical powder, or water fog.

Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### Specific hazards arising from the substance or mixture

Fire hazard Flammable liquid and vapor. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can be electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential static discharge, use proper bonding and grounding procedures. This material may be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment). Vapors are heavier than air and may spread along floors.

Explosion hazard Vapors may form explosive mixtures with air. This material may be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment). Vapors are heavier than air and may spread along floors.

Reactivity Hazardous reactions will not occur under normal conditions.

Hazardous combustion products Carbon oxides, nitrogen oxides. Other irritating fumes and smoke.

#### Advice for firefighters

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.

Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Other information Refer to section 9 of the SDS for flammability properties.

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment, and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe dust/ fumes/ gas/ mists/ vapors/ spray. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

#### Environmental precautions

Avoid discharge into drains, watercourses, or onto the ground.

#### Methods and material for containment and cleaning up

Ventilate the contaminated area. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water to remove residual contamination. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

#### Reference to other sections

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

### SECTION 7: Handling and storage

#### Personal precautions, protective equipment, and emergency procedures

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Vapors may form explosive mixtures with air. Keep away from sources of ignition. NO SMOKING. Do not handle, store, or open near an open flame, sources of heat or sources of ignition. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe dust/fumes/gas/mists/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

#### Conditions for safe storage, including any incompatibilities

Store in well-ventilated place. Keep cool. Keep tightly capped. Store out of direct sunlight between 36°F-85°F. Store away from incompatible materials (refer to section 10 of the SDS).

### SECTION 8: Exposure controls/personal protection

#### Occupational exposure limits

##### US ACGIH Threshold Limit Values

Components	Type	Value
Isopropanol (CAS 67-63-0)	STEL	980 mg/m <sup>3</sup>
Isopropanol (CAS 67-63-0)	TWA	492 mg/m <sup>3</sup>

##### US NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Isopropanol (CAS 67-63-0)	ST	1225 mg/m <sup>3</sup>
Isopropanol (CAS 67-63-0)	TWA	980 mg/m <sup>3</sup>
Isopropanol (CAS 67-63-0)	IDLH	4920 mg/m <sup>3</sup>

##### US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Isopropanol (CAS 67-63-0)	PEL	980 mg/m <sup>3</sup>

#### Biological limit values

##### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Isopropanol (CAS 67-63-0)	40 mg/L	Acetone	Urine	End of shift at end of workweek

#### Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

##### Personal protective equipment

Eye/face protection	Wear appropriate chemical safety goggles if contact is likely to occur.
Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur.

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties**

Physical state	Liquid
Form	Liquid
Color	Clear colorless
Odor	Alcohol
Odor threshold	90 mg/m <sup>3</sup>
pH	No data available
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	180.4°F (82.3°C)
Flash point	53°F (12°C) Closed cup
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Flammable
Upper Flammability Limit	UEL 12% v/v 200° F (93°C)
Lower Flammability Limit	LEL 2% v/v 200° F (93°C)
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	Moderately explosive when exposed to heat or flame.
Oxidizing properties	No data available

**SECTION 10: Stability and reactivity**

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Heat, sparks, open flames, and other ignition sources. Temperatures exceeding the flash point. Direct sunlight. Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Acetaldehyde, acids, chlorine, ethylene oxide, halogenated hydrocarbons, isocyanates, nitrites, organics, strong acids, strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products under normal conditions.

**SECTION 11: Toxicological information****Information on toxicological effects**

Likely routes of exposure are skin/eye contact and ingestion.

<b>Most important symptoms/effects, acute and delayed</b>	Direct skin contact may cause irritation. Symptoms may include redness and itching.
	Direct eye contact may cause serious irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
	Inhalation of mists can cause respiratory irritation, drowsiness, dizziness. Symptoms may include coughing and breathing difficulties.
	Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

May cause cancer.  
Suspected of causing genetic defects.  
Suspected of damaging fertility or the unborn child.

<b>Acute toxicity</b>	This product is not classified as an acute toxicity hazard.
<b>Skin corrosion/irritation</b>	No data available
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory sensitization</b>	No data available
<b>Skin sensitization</b>	No data available
<b>Germ cell mutagenicity</b>	Suspected of causing genetic defects.

#### **Carcinogenicity**

##### **IARC Monographs. Overall Evaluation of Carcinogenicity**

Phenolphthalein; Group 2B-Possibly carcinogenic to humans

##### **OSHA 13 Carcinogens**

Not regulated

##### **US National Toxicology Program (NTP) Report on Carcinogens**

Phenolphthalein; Reasonably anticipated to be a human carcinogen

<b>Reproductive toxicity</b>	Suspected of damaging fertility or the unborn child.
<b>Specific target organ toxicity (single exposure)</b>	May cause drowsiness or dizziness. May cause respiratory irritation.
<b>Specific target organ toxicity (repeated exposure)</b>	No data available
<b>Aspiration hazard</b>	No data available

### **SECTION 12: Ecological information**

<b>Ecotoxicity</b>	This product is not classified as environmentally hazardous.
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	Large or frequent spills can have a harmful or damaging effect on the environment.

### **SECTION 13: Disposal considerations**

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

### **SECTION 14: Transport information**

#### **DOT**

<b>UN number</b>	1219
<b>UN Proper shipping name</b>	Isopropyl alcohol solution
<b>Reportable Quantity</b>	None
<b>Class (Subsidiary risk)</b>	3
<b>Label(s)</b>	3
<b>Packing group</b>	II
<b>Special provisions</b>	IB2, T4, TP1
<b>Packaging exceptions</b>	4b, 150
<b>Packaging, non-bulk</b>	202

#### **IATA**

<b>UN number</b>	1219
<b>UN Proper shipping name</b>	Isopropyl alcohol solution
<b>Class (Subsidiary risk)</b>	3
<b>Packing group</b>	II
<b>Special provisions</b>	A180

**IMDG**

<b>UN number</b>	1219
<b>UN Proper shipping name</b>	Isopropyl alcohol solution
<b>Class (Subsidiary risk)</b>	3
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No
<b>Special provisions</b>	None
<b>EmS</b>	F-E, S-D
<b>Special precautions for user</b>	Read safety instructions, SDS, and emergency procedures before handling.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	This substance/mixture is not intended to be transported in bulk.

**DOT hazard pictograms****IATA; IMDG hazard pictograms****SECTION 15: Regulatory information****US federal regulations****CERCLA Hazardous Substance (40 CFR 302.4)**

Not regulated

**SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)**

Not regulated

**SARA 304 Emergency Release Notification**

Not regulated

**SARA 311/312 Hazardous Chemical**

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0
Phenolphthalein	77-09-8

**SARA 313 (TRI reporting)**

<u>Chemical name</u>	<u>CAS number</u>
Phenolphthalein	77-09-8

**TSCA Section 8(b) Chemical Inventory**

All components are on the U.S. EPA TSCA Inventory list.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)**

Not regulated

**Safe Drinking Water Act (SDWA)**

Not regulated

## US state regulations

### California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

<u>Chemical name</u>	<u>CAS number</u>
Phenolphthalein	77-09-8

**WARNING:** This product can expose you to phenolphthalein, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

### Massachusetts Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Phenolphthalein	77-09-8

### New Jersey Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0
Phenolphthalein	77-09-8

### Pennsylvania Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0

### Rhode Island Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0

## SECTION 16: Other information

### NFPA Rating

Health hazard	2
Fire hazard	3
Reactivity	1
Specific	N/A

### Disclaimer

The information in the Safety Data Sheet is offered for your consideration and guidance for safe handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

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### Issue date:

May 2015

### Last revisions

April 2020

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Sulfuric Acid N
Product number	R-0686; R-0686O; R-0686P; R-0686-PL; R-0686O-PL; R-0686P-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) Identification

<b>Physical hazards</b>	Corrosive to metals	Category 1
<b>Health hazards</b>	Eye damage/irritation	Category 1
	Skin corrosion/irritation	Category 1B
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.	

### Label elements

Hazard pictograms



Signal word	Danger
Hazard statements	May be corrosive to metals. Causes severe skin burns and serious eye damage.
Precautionary statements	
Prevention	Do not breathe dust or mists. Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection if contact is likely to occur. Keep only in original container.
Response	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (OR HAIR): Immediately take off all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a physician or poison control center. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a physician or poison control center. Absorb spillage to prevent material damage.
Storage	Store in corrosive-resistant container with corrosive-resistant inner liner. Keep tightly capped. Store locked up. Store out of direct sunlight between 36°F–85°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazards not otherwise classified</b>	Not applicable

## SECTION 3: Composition/Information on Ingredients

### Mixture

Chemical name	Common name and synonyms	CAS number	% w/w
Water	Dihydrogen oxide	7732-18-5	80-100
Sulfuric acid	Sulphuric acid; Dihydrogen sulfate	7664-93-9	3-7

## SECTION 4: First-Aid Measures

### If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

**In case of skin contact**

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops. Chemical burns must be treated by a physician.

**In case of eye contact**

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

**If swallowed**

Call a physician or poison control center immediately. Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs.

**Most important symptoms and effects, both acute and delayed**

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

**Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep person under observation. Symptoms may be delayed.

**General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**SECTION 5: Firefighting Measures****Extinguishing media**

Suitable extinguishing media	Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Specific hazards arising from the substance or mixture**

Fire hazard	Not flammable
Explosion hazard	Not explosive
Reactivity	May be corrosive to metals
Hazardous combustion products	Sulfur oxides. Other irritating fumes and smoke.

**Advice for firefighters**

Precautionary measures	Exercise caution when fighting any chemical fire; hazardous fumes will be present.
Firefighting equipment/instructions	Use water spray or fog for cooling exposed containers.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	Refer to section 9 of the SDS for flammability properties.

**SECTION 6: Accidental Release Measures****Personal precautions, protective equipment, and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe dust or mists. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

**Environmental precautions**

Avoid discharge into drains, watercourses, or onto the ground.

**Methods and material for containment and cleaning up**

Ventilate the area. Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Dilute acid with water and neutralize with dilute base. If not recoverable, dilute with water or flush to holding area and neutralize. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

**SECTION 7: Handling and Storage****Personal precautions, protective equipment, and emergency procedures**

Do not breathe dust or mists. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

**Conditions for safe storage, including any incompatibilities**

Store in corrosive-resistant container with corrosive-resistant inner liner. Keep tightly capped. Store locked up. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

**SECTION 8: Exposure Controls/Personal Protection****Occupational exposure limits****US ACGIH Threshold Limit Values**

<u>Components</u>	<u>Type</u>	<u>Value</u>
Sulfuric acid (CAS 7664-93-9)	TWA	0.2 mg/m <sup>3</sup> (thoracic particulate)

**US NIOSH: Pocket Guide to Chemical Hazards**

<u>Components</u>	<u>Type</u>	<u>Value</u>
Sulfuric acid (CAS 7664-93-9)	TWA	1 mg/m <sup>3</sup>
Sulfuric acid (CAS 7664-93-9)	IDLH	15 mg/m <sup>3</sup>

**US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<u>Components</u>	<u>Type</u>	<u>Value</u>
Sulfuric acid (CAS 7664-93-9)	TWA	1 mg/m <sup>3</sup>

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Exposure controls**

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

**Personal protective equipment**

Eye/face protection Wear appropriate chemical safety goggles if contact is likely to occur.  
 Skin protection Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.  
 Body protection Wear appropriate protective clothing if contact is likely to occur.  
 Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

**SECTION 9: Physical and Chemical Properties****Information on basic physical and chemical properties**

Physical state	Liquid
Form	Liquid
Color	Clear, colorless or nearly colorless
Odor	Odorless
Odor threshold	No data available
pH	0.6
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available

Vapor pressure	No data available
Vapor density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## SECTION 10: Stability and Reactivity

<b>Reactivity</b>	May be corrosive to metals.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Bases, chlorates, halides, hydrogen peroxide, metal compounds, nitrates, nitromethane, organic materials, oxidizing agents, perchlorates, phosphorous.
<b>Hazardous decomposition products</b>	No hazardous decomposition products under normal conditions.

## SECTION 11: Toxicological Information

### Information on toxicological effects

Likely routes of exposure are skin/eye contact and ingestion.

<b>Most important symptoms/effects, acute and delayed</b>	Direct skin contact may cause corrosive skin burns, deep ulcerations, and possibly permanent scarring. Direct contact with concentrated solutions may be corrosive and may cause severe damage, including blindness. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing, choking, and wheezing. Inhalation could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed. May produce burns to lips, oral cavity, upper airway, esophagus, and possibly the digestive tract. Symptoms may include abdominal pain, vomiting, burns, perforations, and bleeding.
<b>Acute toxicity</b>	This product is not classified as an acute toxicity hazard. See below for product and individual ingredient acute toxicity data.

<b>Product</b>	<b>Species</b>	<b>Acute Toxicity Estimate (ATE)</b>
Sulfuric Acid N (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD <sub>50</sub>	Rat	No data available
<i>Inhalation</i>		
LC <sub>50</sub>	Rat	>5 mg/L
<i>Oral</i>		
LD <sub>50</sub>	Rat	>2000 mg/kg
<b>Components</b>	<b>Species</b>	<b>Acute Toxicity Data</b>
Sulfuric acid (CAS 7664-93-9)		
<b>Acute</b>		
<i>Dermal</i>		
LD <sub>50</sub>	Rat	No data available
<i>Inhalation</i>		
LC <sub>50</sub>	Rat	0.375 mg/L (for aerosol mists)
<i>Oral</i>		
LD <sub>50</sub>	Rat	2140 mg/kg
<b>Skin corrosion/irritation</b>	Causes severe skin burns	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage	

<b>Respiratory sensitization</b>	No data available
<b>Skin sensitization</b>	No data available
<b>Germ cell mutagenicity</b>	No data available

**Carcinogenicity**

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not regulated

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)**

Not regulated

**US National Toxicology Program (NTP) Report on Carcinogens**

Not regulated

<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity (single exposure)</b>	No data available
<b>Specific target organ toxicity (repeated exposure)</b>	No data available
<b>Aspiration hazard</b>	No data available

**SECTION 12: Ecological Information**

<b>Ecotoxicity</b>	This product is not classified as environmentally hazardous.
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	Large or frequent spills can have a harmful or damaging effect on the environment.

**SECTION 13: Disposal Considerations**

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

**SECTION 14: Transport Information**

**DOT**

<b>UN number</b>	2796
<b>UN Proper shipping name</b>	Sulphuric acid
<b>Reportable Quantity</b>	1000 lbs
<b>Class (Subsidiary risk)</b>	8
<b>Label(s)</b>	8
<b>Packing group</b>	II
<b>Special provisions</b>	386, A3, A7, B2, B15, IB2, N6, N34, T8, TP2
<b>Packaging exceptions</b>	154
<b>Packaging, non-bulk</b>	202

**IATA**

<b>UN number</b>	2796
<b>UN Proper shipping name</b>	Sulphuric acid
<b>Class (Subsidiary risk)</b>	8
<b>Packing group</b>	II
<b>Special provisions</b>	None

**IMDG**

<b>UN number</b>	2796
<b>UN Proper shipping name</b>	Sulphuric acid
<b>Class (Subsidiary risk)</b>	8
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No

**Special provisions** None

**EmS** F-A, S-B

**Special precautions for user** Read safety instructions, SDS, and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.

**DOT hazard pictograms**



**IATA; IMDG hazard pictograms**



## SECTION 15: Regulatory Information

### US federal regulations

#### CERCLA Hazardous Substance (40 CFR 302.4)

<u>Chemical name</u>	<u>CAS number</u>	<u>Reportable Quantity</u>
Sulfuric acid	7664-93-9	1000 lbs

#### SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

<u>Chemical name</u>	<u>CAS number</u>
Sulfuric acid	7664-93-9

#### SARA 304 Emergency Release Notification

<u>Chemical name</u>	<u>CAS number</u>
Sulfuric acid	7664-93-9

#### SARA 311/312 Hazardous Chemical

<u>Chemical name</u>	<u>CAS number</u>
Sulfuric acid	7664-93-9

#### SARA 313 (TRI reporting)

Not regulated

#### TSCA Section 8(b) Chemical Inventory

All components are on the U.S. EPA TSCA Inventory list.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)

Not regulated

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

#### Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)

Not regulated

#### Safe Drinking Water Act (SDWA)

Not regulated

### US state regulations

#### California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

Not regulated

#### Massachusetts Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Sulfuric acid	7664-93-9

**New Jersey Worker and Community Right-to-Know Act**

<u>Chemical name</u>	<u>CAS number</u>
Sulfuric acid	7664-93-9

**Pennsylvania Worker and Community Right-to-Know Act**

<u>Chemical name</u>	<u>CAS number</u>
Sulfuric acid	7664-93-9

**Rhode Island Right-to-Know Act**

<u>Chemical name</u>	<u>CAS number</u>
Sulfuric acid	7664-93-9

**SECTION 16: Other Information****NFPA Rating**

Health hazard	2
Fire hazard	0
Reactivity	0
Specific	N/A

**Disclaimer**

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**Issue date:**

May 2015

**Last revisions**

July 2019



# SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

Revision: 10/28/2021

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Phosphonate Titrating Solution
Product number	R-0803; R-0803-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Local: (410) 472-4340 – 8am – 5pm EST Toll-free: (800) 837-8548 – 8am – 5pm EST
<b>Emergency phone number</b>	
CHEMTREC, United States	1-800-424-9300 – 24-hour service
CHEMTREC, International	+1 703-741-5970 – 24-hour service

## SECTION 2: Hazard(s) Identification

<b>Physical hazards</b>	Not applicable
<b>Health hazards</b>	Not applicable
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
<b>Label elements</b>	
Hazard pictograms	Not applicable
Signal word	Not applicable
Hazard statements	This mixture does not meet the criteria for classification.
Precautionary statements	
Prevention	Avoid contact with skin, eyes, or clothing. Do not ingest. Use care when handling.
Response	Wash hands after handling. If eye contact occurs, flush thoroughly with water. If ingested, contact a physician or local poison control center.
Storage	Keep tightly capped. Store out of direct sunlight between 36°F–85°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazards not otherwise classified</b>	Not applicable
<b>Supplemental information</b>	This product contains Thorium Nitrate, a compound known to have low-level, naturally occurring radioactivity. Contact a licensed professional waste disposal service for the proper disposal of this material.

## SECTION 3: Composition/Information on Ingredients

Mixture			
Chemical name	Common name and synonyms	CAS number	% w/w
Water	Dihydrogen oxide	7732-18-5	99.9
Thorium nitrate tetrahydrate	Nitric acid, thorium(4+) salt	13470-07-0	0.1

## SECTION 4: First-Aid Measures

### If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue

rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

#### **If swallowed**

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Contact a physician or local poison control center.

#### **Most important symptoms and effects, both acute and delayed**

Direct skin or eye contact may cause temporary irritation. Symptoms may include redness or itching. Tearing of the eyes or blurred vision may occur. Inhalation may cause respiratory irritation, such as coughing. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Refer to section 11 of the SDS for delayed and immediate effects and chronic effects from short- and long-term exposure.

#### **Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

#### **General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### **SECTION 5: Firefighting Measures**

#### **Extinguishing media**

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### **Specific hazards arising from the substance or mixture**

Fire hazard Not flammable

Explosion hazard Not explosive

Reactivity Hazardous reactions will not occur under normal conditions.

Hazardous combustion products Metal oxides, nitrogen oxides. Other irritating fumes and smoke.

#### **Advice for firefighters**

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.

Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Other information Refer to section 9 of the SDS for flammability properties.

### **SECTION 6: Accidental Release Measures**

#### **Personal precautions, protective equipment, and emergency procedures**

Wear appropriate protective equipment and clothing during cleanup. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

#### **Environmental precautions**

Avoid discharge into drains, watercourses, or onto the ground.

#### **Methods and material for containment and cleaning up**

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for reuse.

Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

#### **Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

### **SECTION 7: Handling and Storage**

#### **Personal precautions, protective equipment, and emergency procedures**

Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

#### **Conditions for safe storage, including any incompatibilities**

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

### **SECTION 8: Exposure Controls/Personal Protection**

#### **Occupational exposure limits**

US ACGIH Threshold Limit Values

Not regulated

**US NIOSH: Pocket Guide to Chemical Hazards**

Not regulated

**US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Not regulated

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Exposure controls**

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

Personal protective equipment

Eye/face protection Wear appropriate safety glasses with side shields (or goggles) if contact is likely to occur.

Skin protection Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.

Body protection Wear appropriate protective clothing if contact is likely to occur.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

**SECTION 9: Physical and Chemical Properties**

**Information on basic physical and chemical properties**

Physical state	Liquid
Form	Liquid
Color	Clear, colorless or nearly colorless
Odor	Odorless
Odor threshold	No data available
pH	3.2
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Other information	
Explosive properties	Not explosive
Oxidizing properties	No data available
Specific activity	5.1E-11 Ci/g

## SECTION 10: Stability and Reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions of use, storage, and transport.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Strong oxidizing agents. Organic materials.
<b>Hazardous decomposition products</b>	Hazardous reactions will not occur under normal conditions.

## SECTION 11: Toxicological Information

### Information on likely routes of exposure

Inhalation	Avoid inhalation of this product. Use in a well-ventilated area.
Skin contact	Direct contact with skin may cause temporary irritation.
Eye contact	Direct contact with eyes may cause serious irritation. Avoid close eye contact; Use caution to avoid splashes. Wear eye protection.
Ingestion	Do not ingest. Avoid accidental ingestion by observing good hygiene practices. Wash hands thoroughly after handling this product.

### Symptoms related to the physical, chemical, and toxicological characteristics

May cause temporary skin or eye irritation. Refer to section 4 of the SDS for most important symptoms and effects.

### Delayed and immediate effects and chronic effects from short- and long-term exposure

<b>Acute toxicity</b>	This product is not classified as an acute toxicity hazard.
<b>Skin corrosion/irritation</b>	No data available
<b>Serious eye damage/eye irritation</b>	No data available
<b>Respiratory sensitization</b>	No data available
<b>Skin sensitization</b>	No data available
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity</b>	Although elemental thorium and thorium nitrate are not classified as carcinogens, both materials are mildly radioactive. Prolonged exposure may be associated with an increased risk of cancer.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

### US National Toxicology Program (NTP) Report on Carcinogens

Not listed

<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity (single exposure)</b>	No data available
<b>Specific target organ toxicity (repeated exposure)</b>	No data available
<b>Aspiration hazard</b>	No data available

## SECTION 12: Ecological Information

<b>Ecotoxicity</b>	This product is not classified as environmentally hazardous.
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	Large or frequent spills can have a harmful or damaging effect on the environment.

## SECTION 13: Disposal Considerations

This product contains Thorium Nitrate, a compound known to have low-level, naturally occurring radioactivity. Contact a licensed professional waste disposal service for the proper disposal of this material. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport Information

DOT	Not regulated as dangerous goods
IATA	Not regulated as dangerous goods
IMDG	Not regulated as dangerous goods

## SECTION 15: Regulatory Information

### US federal regulations

#### CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

#### SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

#### SARA 304 Emergency Release Notification

Not regulated

#### SARA 311/312 Hazardous Chemical

Not regulated

#### SARA 313 (TRI reporting)

Not regulated

#### TSCA Section 8(b) Chemical Inventory

All components are on the U.S. EPA TSCA Inventory list.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)

Not regulated

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

#### Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)

Not regulated

#### Safe Drinking Water Act (SDWA)

Not regulated

### US state regulations

#### California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

Not regulated

#### Massachusetts Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
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Thorium Nitrate	13823-29-5
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#### New Jersey Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
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Thorium Nitrate	13823-29-5
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#### Pennsylvania Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
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Thorium Nitrate	13823-29-5
-----------------	------------

#### Rhode Island Right-to-Know Act

Not regulated

## SECTION 16: Other Information

### NFPA Rating

Health hazard	0
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Fire hazard	0
Reactivity	0
Specific	N/A

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**Issue date:**

May 2015

**Revision date:**

10/28/2021

**Revision information:**

This document embodies significant change(s) that may impact classification, safe handling, or health information for the associated product(s). The information contained herein should be reviewed in its entirety before handling material.

Label supplemental information. First aid measures. Information on likely routes of exposure. Physical and Chemical Properties. Disposal information.

*Supersedes revision dated 2/25/2021.*



# SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Silver Nitrate Reagent
Product number	R-0807; R-0807-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) Identification

<b>Physical hazards</b>	Not applicable
<b>Health hazards</b>	Not applicable
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
<b>Label elements</b>	
Hazard pictograms	Not applicable
Signal word	Not applicable
Hazard statements	Not applicable
Precautionary statements	
Prevention	Avoid contact with skin, eyes, or clothing. For contact with skin or eyes, flush 20 minutes with water. If ingested, contact physician or local poison control center. Treat symptoms as needed.
Response	This reagent is not defined as a hazardous chemical per OSHA's Hazard Communication Standard 2012; however, use care when handling.
Storage	Keep tightly capped. Store out of direct sunlight between 36°F–85°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazards not otherwise classified</b>	Not applicable

## SECTION 3: Composition/Information on Ingredients

<b>Mixture</b>			
<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>% w/w</b>
Water	Dihydrogen oxide	7732-18-5	80-100
Nonhazardous and other components below reportable levels	Not applicable	Not applicable	0.1–1

## SECTION 4: First-Aid Measures

### If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

### If swallowed

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice/attention.

**Most important symptoms and effects, both acute and delayed**

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

**Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**SECTION 5: Firefighting Measures****Extinguishing media**

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.  
Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Specific hazards arising from the substance or mixture**

Fire hazard Not flammable  
Explosion hazard Not explosive  
Reactivity Hazardous reactions will not occur under normal conditions.  
Hazardous combustion products Nitrogen oxides. Other irritating fumes and smoke.

**Advice for firefighters**

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.  
Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.  
Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.  
Other information Refer to section 9 of the SDS for flammability properties.

**SECTION 6: Accidental Release Measures****Personal precautions, protective equipment, and emergency procedures**

Wear appropriate protective equipment and clothing during cleanup. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

**Environmental precautions**

Avoid discharge into drains, watercourses, or onto the ground.

**Methods and material for containment and cleaning up**

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

**SECTION 7: Handling and Storage****Personal precautions, protective equipment, and emergency procedures**

Do not breathe the mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

**Conditions for safe storage, including any incompatibilities**

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

**SECTION 8: Exposure Controls/Personal Protection****Occupational exposure limits****US ACGIH Threshold Limit Values**

Not regulated

**US NIOSH: Pocket Guide to Chemical Hazards**

Not regulated

**US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Not regulated

## Biological limit values

No biological exposure limits noted for the ingredient(s).

## Exposure controls

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.
Personal protective equipment	
Eye/face protection	Wear appropriate chemical safety goggles if contact is likely to occur.
Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

## SECTION 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Clear, colorless or nearly colorless
Odor	Odorless
Odor threshold	No data available
pH	No data available
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## SECTION 10: Stability and Reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Acetylene, alcohols, ammonia, azides, calcium carbide, fluorides, organic compounds, peroxides, powdered metals, strong acids, and strong oxidizing agents.
<b>Hazardous decomposition products</b>	Hazardous reactions will not occur under normal conditions.

## SECTION 11: Toxicological Information

### Information on toxicological effects

Likely routes of exposure are skin/eye contact and ingestion.

#### Most important symptoms/effects, acute and delayed

Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching.

Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

#### Acute toxicity

This product is not classified as an acute toxicity hazard.

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory sensitization

No data available

#### Skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

##### IARC Monographs. Overall Evaluation of Carcinogenicity

Not regulated

##### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

##### US National Toxicology Program (NTP) Report on Carcinogens

Not regulated

#### Reproductive toxicity

No data available

#### Specific target organ toxicity (single exposure)

No data available

#### Specific target organ toxicity (repeated exposure)

No data available

#### Aspiration hazard

No data available

## SECTION 12: Ecological Information

#### Ecotoxicity

This product is not classified as environmentally hazardous.

#### Persistence and degradability

No data available

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

Large or frequent spills can have a harmful or damaging effect on the environment.

## SECTION 13: Disposal Considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport Information

#### DOT

Not regulated as dangerous goods

#### IATA

Not regulated as dangerous goods

#### IMDG

Not regulated as dangerous goods

## SECTION 15: Regulatory Information

#### US federal regulations

##### CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

##### SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

**SARA 304 Emergency Release Notification**

Not regulated

**SARA 311/312 Hazardous Chemical**

Not regulated

**SARA 313 (TRI reporting)**

Not regulated

**TSCA Section 8(b) Chemical Inventory**

All components are on the U.S. EPA TSCA Inventory list.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)**

Not regulated

**Safe Drinking Water Act (SDWA)**

Not regulated

**US state regulations****California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)**

Not regulated

**Massachusetts Right-to-Know Act**

Not regulated

**New Jersey Worker and Community Right-to-Know Act**

Not regulated

**Pennsylvania Worker and Community Right-to-Know Act**

Not regulated

**Rhode Island Right-to-Know Act**

Not regulated

**SECTION 16: Other Information****NFPA Rating**

Health hazard	0
Fire hazard	0
Reactivity	0
Specific	N/A

**Disclaimer**

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**Issue date:**

May 2015

**Last revisions**

July 2019



# SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Thiosulfate N/10
Product number	R-0697; R-0697-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) Identification

<b>Physical hazards</b>	Not applicable
<b>Health hazards</b>	Not applicable
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
<b>Label elements</b>	
Hazard pictograms	Not applicable
Signal word	Not applicable
Hazard statements	Not applicable
Precautionary statements	
Prevention	Avoid contact with skin, eyes, or clothing. For contact with skin or eyes, flush 20 minutes with water. If ingested, contact physician or local poison control center. Treat symptoms as needed.
Response	This reagent is not defined as a hazardous chemical per OSHA's Hazard Communication Standard 2012; however, use care when handling.
Storage	Keep tightly capped. Store out of direct sunlight between 36°F–85°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazards not otherwise classified</b>	Not applicable

## SECTION 3: Composition/Information on Ingredients

<b>Mixture</b>			
<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>% w/w</b>
Water	Dihydrogen oxide	7732-18-5	80-100
Nonhazardous and other components below reportable levels	Not applicable	Not applicable	1-5

## SECTION 4: First-Aid Measures

### If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

### If swallowed

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice/attention.

**Most important symptoms and effects, both acute and delayed**

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

**Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**SECTION 5: Firefighting Measures****Extinguishing media**

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.  
 Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Specific hazards arising from the substance or mixture**

Fire hazard Not flammable.  
 Explosion hazard Not explosive.  
 Reactivity Hazardous reactions will not occur under normal conditions.  
 Hazardous combustion products Carbon oxides, sodium oxides, hydrogen sulfide; sulfur oxides. Other irritating fumes and smoke.

**Advice for firefighters**

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.  
 Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.  
 Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.  
 Other information Refer to section 9 of the SDS for flammability properties.

**SECTION 6: Accidental Release Measures****Personal precautions, protective equipment, and emergency procedures**

Wear appropriate protective equipment and clothing during cleanup. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

**Environmental precautions**

Avoid discharge into drains, watercourses, or onto the ground.

**Methods and material for containment and cleaning up**

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

**SECTION 7: Handling and Storage****Personal precautions, protective equipment, and emergency procedures**

Do not breathe dust or mist. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

**Conditions for safe storage, including any incompatibilities**

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

**SECTION 8: Exposure Controls/Personal Protection****Occupational exposure limits****US ACGIH Threshold Limit Values**

Not regulated

**US NIOSH: Pocket Guide to Chemical Hazards**

Not regulated

**US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Not regulated

## Biological limit values

No biological exposure limits noted for the ingredient(s).

## Exposure controls

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.
Personal protective equipment	
Eye/face protection	Wear appropriate chemical safety goggles if contact is likely to occur.
Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

## SECTION 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Clear, colorless or nearly colorless
Odor	Odorless
Odor threshold	No data available
pH	9.6
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## SECTION 10: Stability and Reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Strong oxidizing agents and strong acids.
<b>Hazardous decomposition products</b>	No hazardous decomposition products under normal conditions.

## SECTION 11: Toxicological Information

### Information on toxicological effects

Likely routes of exposure are skin/eye contact and ingestion.

#### Most important symptoms/effects, acute and delayed

Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching.

Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

#### Acute toxicity

This product is not classified as an acute toxicity hazard.

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory sensitization

No data available

#### Skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

##### IARC Monographs. Overall Evaluation of Carcinogenicity

Not regulated

##### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

##### US National Toxicology Program (NTP) Report on Carcinogens

Not regulated

#### Reproductive toxicity

No data available

#### Specific target organ toxicity (single exposure)

No data available

#### Specific target organ toxicity (repeated exposure)

No data available

#### Aspiration hazard

No data available

## SECTION 12: Ecological Information

#### Ecotoxicity

This product is not classified as environmentally hazardous.

#### Persistence and degradability

No data available

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

Large or frequent spills can have a harmful or damaging effect on the environment.

## SECTION 13: Disposal Considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport Information

#### DOT

Not regulated as dangerous goods

#### IATA

Not regulated as dangerous goods

#### IMDG

Not regulated as dangerous goods

## SECTION 15: Regulatory Information

#### US federal regulations

##### CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

##### SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

**SARA 304 Emergency Release Notification**

Not regulated

**SARA 311/312 Hazardous Chemical**

Not regulated

**SARA 313 (TRI reporting)**

Not regulated

**TSCA Section 8(b) Chemical Inventory**

All components are on the U.S. EPA TSCA Inventory list.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)**

Not regulated

**Safe Drinking Water Act (SDWA)**

Not regulated

**US state regulations****California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)**

Not regulated

**Massachusetts Right-to-Know Act**

Not regulated

**New Jersey Worker and Community Right-to-Know Act**

Not regulated

**Pennsylvania Worker and Community Right-to-Know Act**

Not regulated

**Rhode Island Right-to-Know Act**

Not regulated

**SECTION 16: Other information****NFPA Rating**

Health hazard	0
Fire hazard	0
Reactivity	0
Specific	N/A

**Disclaimer**

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**Issue date:**

May 2015

**Last revisions**

December 2019



# SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

## SECTION 1: Identification

<b>Product identifier</b>	
Product name	XO Indicator Powder
Product number	R-0802P; R-0802P-PL
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) Identification

<b>Physical hazards</b>	Not applicable
<b>Health hazards</b>	Not applicable
<b>Environmental hazards</b>	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
<b>Label elements</b>	
Hazard pictograms	Not applicable
Signal word	Not applicable
Hazard statements	Not applicable
Precautionary statements	
Prevention	Avoid contact with skin, eyes, or clothing. For contact with skin or eyes, flush 20 minutes with water. If ingested, contact physician or local poison control center. Treat symptoms as needed.
Response	This reagent is not defined as a hazardous chemical per OSHA's Hazard Communication Standard 2012; however, use care when handling.
Storage	Keep tightly capped. Store out of direct sunlight between 36°F–85°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazards not otherwise classified</b>	Not applicable

## SECTION 3: Composition/Information on Ingredients

### Mixture

Chemical name	Common name and synonyms	CAS number	% w/w
Nonhazardous and other components below reportable levels	Not applicable	Not applicable	100

## SECTION 4: First-Aid Measures

### If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

### If swallowed

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice/attention.

**Most important symptoms and effects, both acute and delayed**

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

**Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**SECTION 5: Firefighting Measures****Extinguishing media**

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.  
Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Specific hazards arising from the substance or mixture**

Fire hazard Not flammable  
Explosion hazard Not explosive  
Reactivity Hazardous reactions will not occur under normal conditions.  
Hazardous combustion products Carbon oxides, hydrogen chloride gas, potassium oxides, sodium oxides, and sulfur oxides. Other irritating fumes and smoke.

**Advice for firefighters**

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.  
Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.  
Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.  
Other information Refer to section 9 of the SDS for flammability properties.

**SECTION 6: Accidental Release Measures****Personal precautions, protective equipment, and emergency procedures**

Wear appropriate protective equipment and clothing during cleanup. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

**Environmental precautions**

Avoid discharge into drains, watercourses, or onto the ground.

**Methods and material for containment and cleaning up**

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

**SECTION 7: Handling and Storage****Personal precautions, protective equipment, and emergency procedures**

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

**Conditions for safe storage, including any incompatibilities**

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

**SECTION 8: Exposure Controls/Personal Protection****Occupational exposure limits****US ACGIH Threshold Limit Values**

Not regulated

**US NIOSH: Pocket Guide to Chemical Hazards**

Not regulated

**US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Not regulated

## Biological limit values

No biological exposure limits noted for the ingredient(s).

## Exposure controls

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.
Personal protective equipment	
Eye/face protection	Wear appropriate chemical safety goggles if contact is likely to occur.
Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

## SECTION 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state	Solid
Form	Crystalline
Color	Grayish purple
Odor	Odorless
Odor threshold	No data available
pH	No data available
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## SECTION 10: Stability and Reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Strong oxidizing agents, strong acids.
<b>Hazardous decomposition products</b>	Hazardous reactions will not occur under normal conditions.

## SECTION 11: Toxicological Information

### Information on toxicological effects

Likely routes of exposure are skin/eye contact and ingestion.

#### Most important symptoms/effects, acute and delayed

Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching.

Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

#### Acute toxicity

This product is not classified as an acute toxicity hazard.

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory sensitization

No data available

#### Skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

##### IARC Monographs. Overall Evaluation of Carcinogenicity

Not regulated

##### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

##### US National Toxicology Program (NTP) Report on Carcinogens

Not regulated

#### Reproductive toxicity

No data available

#### Specific target organ toxicity (single exposure)

No data available

#### Specific target organ toxicity (repeated exposure)

No data available

#### Aspiration hazard

No data available

## SECTION 12: Ecological Information

#### Ecotoxicity

This product is not classified as environmentally hazardous.

#### Persistence and degradability

No data available

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

Large or frequent spills can have a harmful or damaging effect on the environment.

## SECTION 13: Disposal Considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport Information

#### DOT

Not regulated as dangerous goods

#### IATA

Not regulated as dangerous goods

#### IMDG

Not regulated as dangerous goods

## SECTION 15: Regulatory Information

#### US federal regulations

##### CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

##### SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

**SARA 304 Emergency Release Notification**

Not regulated

**SARA 311/312 Hazardous Chemical**

Not regulated

**SARA 313 (TRI reporting)**

Not regulated

**TSCA Section 8(b) Chemical Inventory**

All components are on the U.S. EPA TSCA Inventory list.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)**

Not regulated

**Safe Drinking Water Act (SDWA)**

Not regulated

**US state regulations****California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)**

Not regulated

**Massachusetts Right-to-Know Act**

Not regulated

**New Jersey Worker and Community Right-to-Know Act**

Not regulated

**Pennsylvania Worker and Community Right-to-Know Act**

Not regulated

**Rhode Island Right-to-Know Act**

Not regulated

**SECTION 16: Other Information****NFPA Rating**

Health hazard	0
Fire hazard	0
Reactivity	0
Specific	N/A

**Disclaimer**

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