



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.	<b>Phone Number</b> (314) 469-7000 / (800) 554-5499	<b>CHEMTREC</b> (800) 424-9300		
<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/14/07
<b>Product Name</b> CAN Solution	<b>Product Number</b> 4797-0 & 4798-2	<b>Product Use</b> Acidic inorganic salt solution for water testing		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>% By Wt.</u>	<u>CAS Number</u>	<u>TLV</u>	<u>PEL</u>
Sulfuric acid	<15	7664-93-9	1 mg/m3 STEL: 3 mg/m3	1 mg/m3
Ceric sulfate	<15	13590-82-4		
Deionized water	to 100	7732-18-5		

## SECTION 3 – HAZARD IDENTIFICATION

**Emergency Overview:** ROUTE(S) OF ENTRY: Ingestion & Skin. TARGET ORGAN(S): Eyes, skin

### Potential Health Effects

**Eyes:** Corrosive. Contact causes severe burns.

**Skin:** Corrosive. Contact causes severe burns.

**Ingestion:** Corrosive. Causes severe burns of mouth, esophagus, and stomach.

**Inhalation:** NA

**Chronic Exposure:** No Data.

**Carcinogenicity:** NTP No IARC No OSHA No

**Medical Conditions Aggravated by Exposure:** Eye and skin conditions.

## SECTION 4 – FIRST AID MEASURES

**Eyes:** Immediately flush eyes and skin with water for 20 minutes or until chemical is removed. Call physician.

**Skin:** Wash skin thoroughly with soap and water.

**Ingestion:** Give large amounts of water or large amounts of water with milk of magnesia. Call physician. DO NOT INDUCE VOMITING. DO NOT give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.

**Inhalation:** NA

## SECTION 5 – FIREFIGHTING MEASURES

**Flash Point:** NA°C/NA°F

**Autoignition Temp:** No Data.°C/No Data.°F

**Hazardous Products of Combustion:** No Data.

**Flammable Limits in Air:** NA

**Extinguishing Media:** Dry chemical, carbon dioxide

**Fire and Explosion Hazards:** May react violently with water. May react with metals to produce hydrogen gas. May ignite combustible materials. May emit toxic fumes of sulfur oxides.

**Special Firefighting Procedures:** Wear self-contained (positive pressure if available) breathing apparatus and special protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Neutralize with soda ash. Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** safety glasses, face shield

**Protective Clothing:** Rubber gloves, lab coat, rubber apron

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> 80%
<b>Color:</b> Orange	<b>Vapor Density [air =1]:</b> 0.6	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> Pungent	<b>Vapor Pressure:</b> 17	<b>Specific Gravity:</b> 1.1
<b>Boiling Point:</b> 100-102°C/212-215°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> 0.5

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures. Contact with strong alkali, metals.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient</b> (Specify Species)	<b>LC50 of Ingredient</b> (Specify Species)
Sulfuric acid	7664-93-9		LD50(oral-rat): 2140 mg/kg	

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Incineration or other method to comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: DOT Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)				ORM-D
<b>IMO</b> (Water)	No Data.			
<b>ICAO</b> (Air)	No Data.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	No Data.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 3 Flammability: 0 Reactivity: 2 Specific: No water

**SECTION 16 – OTHER INFORMATION**

No Data.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.



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## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/21/07
<b>Product Name</b> Chromate Indicator	<b>Product Number</b> 4798-2 & W017-0	<b>Product Use</b> Inorganic salt solution for water testing.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>% By Wt.</u>	<u>CAS Number</u>	<u>TLV</u>	<u>PEL</u>
Potassium chromate	5	7789-00-6	TLV: 52 ug/m3 (as Cr(VI)) STEL: NE	5 ug/m3 (as Cr(VI))
Deionized water	to 100	7732-18-5		

## SECTION 3 – HAZARD IDENTIFICATION

**Emergency Overview:** ROUTE(S) OF ENTRY: Ingestion & Skin. TARGET ORGAN(S): Eyes, skin, kidneys

### Potential Health Effects

**Eyes:** Irritant. Contact may cause conjunctivitis.

**Skin:** Irritant. Contact may cause dermatitis.

**Ingestion:** May cause severe gastrointestinal irritation, circulatory collapse, coma, toxic nephritis.

**Inhalation:** NA

**Chronic Exposure:** No Data.

**Carcinogenicity:** NTP Yes IARC Yes OSHA Yes. Potassium chromate is not listed specifically in the NTP Annual Report on Carcinogens (latest edition) but would be included under "chromium and certain chromium compounds".

**Medical Conditions Aggravated by Exposure:** Eye and skin conditions

## SECTION 4 – FIRST AID MEASURES

**Eyes:** Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician.

**Skin:** Wash skin thoroughly with soap and water.

**Ingestion:** Give large amounts of water. Call physician. Induce vomiting under direction of physician. DO NOT induce vomiting or give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.

**Inhalation:** NA

## SECTION 5 – FIREFIGHTING MEASURES

**Flash Point:** NA°C/NA°F

**Autoignition Temp:** NA°C/NA°F

**Hazardous Products of Combustion:** No Data.

**Flammable Limits in Air:** LEL: NA UEL: NA

**Extinguishing Media:** Dry chemical, carbon dioxide, water spray or foam

**Fire and Explosion Hazards:** Contact with combustible materials may increase fire intensity. May emit toxic fumes.

**Special Firefighting Procedures:** Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** Safety glasses.

**Protective Clothing:** General purpose gloves, lab coat

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> BY VOLUME: 95%
<b>Color:</b> Clear, yellow	<b>Vapor Density [air =1]:</b> .6	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> None	<b>Vapor Pressure:</b> (mm Hg): 17	<b>Specific Gravity:</b> 1.04
<b>Boiling Point:</b> 100-107°C/212-215°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> 9.1

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures. Contact with strong reducing agents, combustible materials.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient (Specify Species)</b>	<b>LC50 of Ingredient (Specify Species)</b>
Potassium chromate	7789-00-6		LDLo(oral-hmn): 50 mg/kg	

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** To comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: Not Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)	Not Regulated.			
<b>IMO</b> (Water)	Not Regulated.			
<b>ICAO</b> (Air)	Not Regulated.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	Potassium chromate is subject to the reporting requirements of SARA Title III Section 313 and 40 CFR 372.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 3 Flammability: 0 Reactivity: 3 Special: OX

**SECTION 16 – OTHER INFORMATION**

No Data.

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<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/23/07
<b>Product Name</b> Ferroun Indicator	<b>Product Number</b> 4798-2	<b>Product Use</b> Inorganic/organic salt solution for water testing.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>% By Wt.</u>	<u>CAS Number</u>	<u>TLV</u>	<u>PEL</u>
1,10-Phenanthroline	<5	66-71-7	NE	NE
Nonhazardous ingredients	<1	NA		
Deionized water	to 100	7732-18-5		

## SECTION 3 – HAZARD IDENTIFICATION

<b>Emergency Overview:</b> ROUTE(S) OF ENTRY: Ingestion & Skin. TARGET ORGAN(S): Eyes, skin
<b>Potential Health Effects</b>
<b>Eyes:</b> Irritant.
<b>Skin:</b> Contact may cause staining.
<b>Ingestion:</b> Irritant. May cause moderate to severe gastrointestinal irritation.
<b>Inhalation:</b> NA
<b>Chronic Exposure:</b> No Data.
<b>Carcinogenicity:</b> NTP No IARC No OSHA No
<b>Medical Conditions Aggravated by Exposure:</b> Eye and skin conditions

## SECTION 4 – FIRST AID MEASURES

<b>Eyes:</b> Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician.
<b>Skin:</b> Wash skin thoroughly with soap and water.
<b>Ingestion:</b> Give large amounts of water. Call physician. Induce vomiting under direction of physician. DO NOT induce vomiting or give anything by mouth to a person who is unconscious, rapidly losing consciousness or convulsing.
<b>Inhalation:</b> NA

## SECTION 5 – FIREFIGHTING MEASURES

<b>Flash Point:</b> NA°C/NA°F
<b>Autoignition Temp:</b> NA°C/NA°F
<b>Hazardous Products of Combustion:</b> No Data.
<b>Flammable Limits in Air:</b> LEL: NA UEL: NA
<b>Extinguishing Media:</b> NA
<b>Fire and Explosion Hazards:</b> May emit toxic fumes of nitrogen oxides, sulfur oxides.
<b>Special Firefighting Procedures:</b> Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** safety glasses.

**Protective Clothing:** General purpose gloves, lab coat

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> BY VOLUME: 98%
<b>Color:</b> Dark red	<b>Vapor Density [air =1]:</b> 0.6	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> None	<b>Vapor Pressure:</b> (mm Hg): 17	<b>Specific Gravity:</b> 1
<b>Boiling Point:</b> 100°C/212°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> 3.2

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient</b> (Specify Species)	<b>LC50 of Ingredient</b> (Specify Species)
1,10-Phenanthroline	66-71-7		LD50(oral-rat): 132 mg/kg	

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Incineration or other method to comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: Not Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)	Not Regulated.			
<b>IMO</b> (Water)	No Data.			
<b>ICAO</b> (Air)	No Data.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	No Data.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 0 Flammability: 0 Reactivity: 0 Specific: NA

**SECTION 16 – OTHER INFORMATION**

No Data.

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<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/23/07
<b>Product Name</b> Fluoride Masking Agent	<b>Product Number</b> 4798-2 & 4804-0	<b>Product Use</b> Inorganic salt solution for water testing.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>% By Wt.</u>	<u>CAS Number</u>	<u>TLV</u>	<u>PEL</u>
Beryllium sulfate	<2	7787-56-6	TLV: .002 mg/m3 (as Be) STEL: .025 mg/m3 (as Be)	PEL: .002 mg/m3 (as Be)
Deionized water	to 100	7732-18-5		

## SECTION 3 – HAZARD IDENTIFICATION

**Emergency Overview:** ROUTE(S) OF ENTRY: Ingestion & Skin. TARGET ORGAN(S): Eyes, skin

### Potential Health Effects

**Eyes:** Irritant

**Skin:** Irritant, toxic. Contact may cause dermatitis, skin ulcers.

**Ingestion:** Irritant, toxic. May cause gastrointestinal irritation, possible death.

**Inhalation:** NA

**Chronic Exposure:** No Data.

**Carcinogenicity:** NTP Yes IARC Yes OSHA No. Beryllium sulfate is not listed specifically in the NTP Annual Report on Carcinogens (latest edition) but is included under "beryllium and certain beryllium compounds".

**Medical Conditions Aggravated by Exposure:** Eye and skin conditions

## SECTION 4 – FIRST AID MEASURES

**Eyes:** Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician.

**Skin:** Wash skin thoroughly with soap and water.

**Ingestion:** Give large amounts of water. Call physician. Induce vomiting under direction of physician. DO NOT induce vomiting or give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.

**Inhalation:** NA

## SECTION 5 – FIREFIGHTING MEASURES

**Flash Point:** NA°C/NA°F

**Autoignition Temp:** NA°C/NA°F

**Hazardous Products of Combustion:** No Data.

**Flammable Limits in Air:** LEL: NA UEL: NA

**Extinguishing Media:** Dry chemical, carbon dioxide, water spray or foam

**Fire and Explosion Hazards:** May emit toxic fumes of beryllium oxide, sulfuric acid, sulfur oxides.

**Special Firefighting Procedures:** Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** safety glasses

**Protective Clothing:** Rubber gloves, lab coat

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> BY VOLUME: 96%
<b>Color:</b> Clear, colorless	<b>Vapor Density [air =1]:</b> .6	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> None	<b>Vapor Pressure:</b> (mm Hg): 17	<b>Specific Gravity:</b> 1
<b>Boiling Point:</b> 100°C/212°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> 2.8

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient</b> (Specify Species)	<b>LC50 of Ingredient</b> (Specify Species)
Beryllium sulfate	7787-56-6		LD50(ori-rat): 82 mg/kg	

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Incineration or other method to comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: Not Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)	Not Regulated.			
<b>IMO</b> (Water)	No Data.			
<b>ICAO</b> (Air)	No Data.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	Beryllium sulfate is subject to the reporting requirements of SARA Title III Section 313 and 40 CFR 372.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 3 Flammability: 0 Reactivity: 0 Specific: NA

**SECTION 16 – OTHER INFORMATION**

No Data.

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## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.	<b>Phone Number</b> (314) 469-7000 / (800) 554-5499		<b>CHEMTREC</b> (800) 424-9300	
<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/21/07
<b>Product Name</b> Hardness Buffer	<b>Product Number</b> 4798-2 & W017-0	<b>Product Use</b> Alkaline solution for water test		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>% By Wt.</u>	<u>CAS Number</u>	<u>TLV</u>	<u>PEL</u>
Ammonium hydroxide	<30	1336-21-6	TLV: 18 mg/m3 (as ammonia) STEL: 27 mg/m3 (as ammonia)	35 mg/m3 (as ammonia)
Ammonium chloride	<10	12125-02-9	NE	NE
Ammonium sulfide	<1	12135-76-1	NE	NE
Deionized water	to 100	7732-18-5		

## SECTION 3 – HAZARD IDENTIFICATION

<b>Emergency Overview:</b> ROUTE(S) OF ENTRY: Inhalation, Ingestion & Skin. TARGET ORGAN(S): Eyes, skin, respiratory tract.
<b>Potential Health Effects</b>
<b>Eyes:</b> Corrosive. Contact causes severe burns.
<b>Skin:</b> Corrosive. Contact causes severe burns.
<b>Ingestion:</b> Corrosive. Causes severe irritation or burns of mouth, esophagus, stomach.
<b>Inhalation:</b> Irritant
<b>Chronic Exposure:</b> No Data.
<b>Carcinogenicity:</b> NTP No IARC No OSHA No
<b>Medical Conditions Aggravated by Exposure:</b> Eye, skin, and respiratory conditions

## SECTION 4 – FIRST AID MEASURES

<b>Eyes:</b> Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician.
<b>Skin:</b> Wash skin thoroughly with soap and water.
<b>Ingestion:</b> Give large amounts of water or large amounts of water with milk of magnesia. Call physician. DO NOT INDUCE VOMITING. DO NOT give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.
<b>Inhalation:</b> Remove to fresh air. Call physician.

## SECTION 5 – FIREFIGHTING MEASURES

**Flash Point:** NA°C/NA°F

**Autoignition Temp:** No Data.°C/No Data.°F

**Hazardous Products of Combustion:** No Data.

**Flammable Limits in Air:** LEL: 16% as NH3 UEL: 27% as NH3

**Extinguishing Media:** Dry chemical, carbon dioxide, water spray or foam

**Fire and Explosion Hazards:** May emit toxic fumes of sulfur oxides, nitrogen oxides, ammonia, hydrogen sulfide, hydrogen chloride.

**Special Firefighting Procedures:** Wear self-contained (positive pressure if available) breathing apparatus and special protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Neutralize with dilute acid. Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry, well-ventilated area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** Safety glasses, face shield.

**Protective Clothing:** Rubber gloves, lab coat, rubber apron.

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** adequate ventilation

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> by volume 92%
<b>Color:</b> Colorless to yellow	<b>Vapor Density [air =1]:</b> .6	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> Sulfidic/ammonical	<b>Vapor Pressure:</b> (mm Hg):143	<b>Specific Gravity:</b> .97
<b>Boiling Point:</b> 49-60°C/120-140°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> 10.6

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures. Contact with acids, strong oxidizers, metals.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient (Specify Species)</b>	<b>LC50 of Ingredient (Specify Species)</b>
Ammonium hydroxide	1336-21-6		LD50(oral-rat): 350 mg/kg	No Data.
Ammonium sulfide	12135-76-1		LD50(oral-rat): 168 mg/kg	No Data.
Ammonium chloride	12125-02-9		LD50(oral-rat): 1650 mg/kg	No Data.

## SECTION 12 – ECOLOGICAL INFORMATION

<u>Hazardous Ingredients</u>	<u>Aquatic Toxicity Data</u>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** To comply with all local, state, and federal regulations.

## SECTION 14 – TRANSPORTATION INFORMATION

**Special Shipping Information:** DOT Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)		No Data.	No Data.	ORM-D
<b>IMO</b> (Water)	No Data.			
<b>ICAO</b> (Air)	No Data.			

## SECTION 15 – REGULATORY INFORMATION

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	Ammonium hydroxide is subject to the reporting requirements of SARA Title III Section 313 and 40 CFR 372.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 3 Flammability: 1 Reactivity: 2 Special: NA

## SECTION 16 – OTHER INFORMATION

No Data.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.	<b>Phone Number</b> (314) 469-7000 / (800) 554-5499	<b>CHEMTREC</b> (800) 424-9300		
<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/21/07
<b>Product Name</b> Hardness Indicator Powder	<b>Product Number</b> 4798-2 & W017-0	<b>Product Use</b> Organic dye/sucrose mixture for water testing.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<b>Hazardous Ingredients</b>	<b>% By Wt.</b>	<b>CAS Number</b>	<b>TLV</b>	<b>PEL</b>
Sucrose	to 100	57-50-1		
Nonhazardous ingredients	<1			

## SECTION 3 – HAZARD IDENTIFICATION

**Emergency Overview:** Inhalation, Ingestion & Skin. Eyes, skin, respiratory tract.

### **Potential Health Effects**

**Eyes:** Contact may cause irritation.

**Skin:** Contact may cause staining.

**Ingestion:** Irritant. May cause gastrointestinal irritation.

**Inhalation:** Irritant.

**Chronic Exposure:** No Data.

**Carcinogenicity:** NTP No IARC No OSHA No

**Medical Conditions Aggravated by Exposure:** Eye, skin, and respiratory conditions

## SECTION 4 – FIRST AID MEASURES

**Eyes:** Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician.

**Skin:** Wash skin thoroughly with soap and water.

**Ingestion:** Give large amounts of water. Call physician. Induce vomiting under direction of physician. DO NOT induce vomiting or give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.

**Inhalation:** Remove to fresh air. Call physician.

## SECTION 5 – FIREFIGHTING MEASURES

**Flash Point:** NA°C/NA°F

**Autoignition Temp:** NA°C/NA°F

**Hazardous Products of Combustion:** No Data.

**Flammable Limits in Air:** LEL: NA UEL: NA

**Extinguishing Media:** Dry chemical, carbon dioxide, water spray or foam

**Fire and Explosion Hazards:** May emit toxic fumes of carbon monoxide, nitrogen oxides and produce oxygen.

**Special Firefighting Procedures:** Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Sweep up. Avoid raising dust. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** dust mask

**Eye Protection:** safety glasses.

**Protective Clothing:** General purpose gloves, lab coat,

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Solid	<b>Freezing Point:</b> NA°C/NA°F	<b>% Volatile by Weight:</b> by volume 1%
<b>Color:</b> purple crystals	<b>Vapor Density [air =1]:</b> NA	<b>Evaporation Rate:</b> NA
<b>Odor:</b> None	<b>Vapor Pressure:</b> NA	<b>Specific Gravity:</b> 1.6
<b>Boiling Point:</b> NA°C/NA°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> NA

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient (Specify Species)</b>	<b>LC50 of Ingredient (Specify Species)</b>
No Data.				

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Incineration or other method to comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: Not Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)	Not Regulated.			
<b>IMO</b> (Water)	No Data.			
<b>ICAO</b> (Air)	No Data.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	No Data.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 0 Flammability: 0 Reactivity: 0 Specific: NA

**SECTION 16 – OTHER INFORMATION**

No Data.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.	<b>Phone Number</b> (314) 469-7000 / (800) 554-5499	<b>CHEMTREC</b> (800) 424-9300		
<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/22/07
<b>Product Name</b> Hardness Reagent	<b>Product Number</b> 4798-2 & W017-0	<b>Product Use</b> Organic chelant solution for water testing.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<b>Hazardous Ingredients</b>	<b>% By Wt.</b>	<b>CAS Number</b>	<b>TLV</b>	<b>PEL</b>
Ethylenediaminetetraacetic Acid	<5	60-00-4		
Nonhazardous ingredients	<1	N/A		
Deionized water	to 100	7732-18-5		

## SECTION 3 – HAZARD IDENTIFICATION

<b>Emergency Overview:</b> ROUTE(S) OF ENTRY: Ingestion & Skin. TARGET ORGAN(S): Eyes, skin
<b>Potential Health Effects</b>
<b>Eyes:</b> Contact may cause irritation.
<b>Skin:</b> Contact may cause irritation.
<b>Ingestion:</b> Large quantities may cause gastrointestinal irritation.
<b>Inhalation:</b> NA
<b>Chronic Exposure:</b> No Data.
<b>Carcinogenicity:</b> NTP No IARC No OSHA No
<b>Medical Conditions Aggravated by Exposure:</b> Eye and skin conditions

## SECTION 4 – FIRST AID MEASURES

<b>Eyes:</b> Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician.
<b>Skin:</b> Wash skin thoroughly with soap and water.
<b>Ingestion:</b> Give large amounts of water. Call physician. Treat symptoms as needed. DO NOT give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.
<b>Inhalation:</b> NA

## SECTION 5 – FIREFIGHTING MEASURES

<b>Flash Point:</b> N/A°C/N/A°F
<b>Autoignition Temp:</b> No Data.°C/No Data.°F
<b>Hazardous Products of Combustion:</b> No Data.
<b>Flammable Limits in Air:</b> LEL: NA UEL: NA
<b>Extinguishing Media:</b> Dry chemical, carbon dioxide, water spray or foam
<b>Fire and Explosion Hazards:</b> May emit toxic fumes of nitrogen oxides, sodium oxide.
<b>Special Firefighting Procedures:</b> Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** safety glasses

**Protective Clothing:** General purpose gloves & lab coat

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> BY VOLUME: 99%
<b>Color:</b> Clear, colorless	<b>Vapor Density [air =1]:</b> .6	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> None	<b>Vapor Pressure:</b> (mm Hg): 17	<b>Specific Gravity:</b> 1
<b>Boiling Point:</b> 100°C/212°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> 8.1

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient</b> (Specify Species)	<b>LC50 of Ingredient</b> (Specify Species)
Ethylenediaminetetraacetic acid	60-00-4		LD50(ori-rat): 2000 mg/kg	

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Incineration or other method to comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: Not Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)	Not Regulated.			
<b>IMO</b> (Water)	No Data.			
<b>ICAO</b> (Air)	No Data.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	No Data.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 0 Flammability: 0 Reactivity: 0 Specific: NA

**SECTION 16 – OTHER INFORMATION**

No Data.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.		<b>Phone Number</b> (314) 469-7000 / (800) 554-5499		<b>CHEMTREC</b> (800) 424-9300	
<b>Street Address</b> 2008 Altom Court		<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/23/07
<b>Product Name</b> Long Range Indicator		<b>Product Number</b> 4798-2	<b>Product Use</b> Alcoholic organic dye solution for water testing.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>% Bv Wt.</u>	<u>CAS Number</u>	<u>TLV</u>	<u>PEL</u>
Isopropyl alcohol	>70	67-63-0	TLV: 980 mg/m3 STEL: NE	980 mg/m3
Phenolphthalein	<1	77-09-8	NE	NE
Methyl red	<1	845-10-3		
Meta-cresol purple	<1	2303-01-7		
Bromthymol blue	<1	34722-90-2		
Deionized water	to 100	7732-18-5		

## SECTION 3 – HAZARD IDENTIFICATION

<b>Emergency Overview:</b> ROUTE(S) OF ENTRY: Inhalation Ingestion Skin. TARGET ORGAN(S): Eyes, skin, respiratory tract, kidneys, liver, adrenal glands, reproductive organs.
<b>Potential Health Effects</b>
<b>Eyes:</b> Irritant.
<b>Skin:</b> Irritant. Contact may cause staining.
<b>Ingestion:</b> Irritant. May cause severe gastrointestinal disturbance.
<b>Inhalation:</b> Irritant. May cause narcosis.
<b>Chronic Exposure:</b> No Data.
<b>Carcinogenicity:</b> NTP Yes IARC No OSHA No
<b>Medical Conditions Aggravated by Exposure:</b> Eye, skin, and respiratory conditions

## SECTION 4 – FIRST AID MEASURES

<b>Eyes:</b> Immediately flush eyes with water for 15 minutes. Call physician.
<b>Skin:</b> Wash skin thoroughly with soap and water.
<b>Ingestion:</b> Give large amounts of water. Call physician. Induce vomiting under direction of physician.
<b>Inhalation:</b> Remove to fresh air. Call physician.

## SECTION 5 – FIREFIGHTING MEASURES

**Flash Point:** 19°C/66°F

**Autoignition Temp:** No Data.°C/No Data.°F

**Hazardous Products of Combustion:** No Data.

**Flammable Limits in Air:** LEL: 3.3% UEL: 18.9%

**Extinguishing Media:** Dry chemical, carbon dioxide, water spray, or alcohol foam

**Fire and Explosion Hazards:** Vapors flammable. May be ignited by heat, sparks, or flames. May emit toxic fumes.

**Special Firefighting Procedures:** Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing. Cool exposed containers with water spray. Knock down vapors with water spray.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry, well-ventilated area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** safety glasses

**Protective Clothing:** General purpose gloves, lab coat

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> BY VOLUME: 99%
<b>Color:</b> Dark green	<b>Vapor Density [air =1]:</b> 2	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> Alcohol	<b>Vapor Pressure:</b> 33	<b>Specific Gravity:</b> .97
<b>Boiling Point:</b> 88°C/190°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> NA

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures. Protect from sparks, flames, oxidizers.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient (Specify Species)</b>	<b>LC50 of Ingredient (Specify Species)</b>
Isopropyl alcohol	67-63-0		LD50(ori-rat): 5840 mg/kg	
Phenolphthalein	77-09-8		LD(ori-rat): >1 gm/kg	

**SECTION 12 – ECOLOGICAL INFORMATION**

<u>Hazardous Ingredients</u>	<u>Aquatic Toxicity Data</u>
No Data.	

**SECTION 13 – DISPOSAL CONSIDERATIONS**

**Waste Disposal:** Incineration or other method to comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

**Special Shipping Information:** DOT Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)				ORM-D
<b>IMO</b> (Water)	No Data.			
<b>ICAO</b> (Air)	No Data.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	No Data.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 1 Flammability: 3 Reactivity: 0 Specific: NA

**SECTION 16 – OTHER INFORMATION**

No Data.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.	<b>Phone Number</b> (314) 469-7000 / (800) 554-5499	<b>CHEMTREC</b> (800) 424-9300		
<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/21/07
<b>Product Name</b> Methyl Orange Indicator	<b>Product Number</b> 4798-2	<b>Product Use</b> Organic dye solution for water testing.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<b>Hazardous Ingredients</b>	<b>% By Wt.</b>	<b>CAS Number</b>	<b>TLV</b>	<b>PEL</b>
Nonhazardous ingredients	<1	No Data.		
Deionized water	to 100	7732-18-5		

## SECTION 3 – HAZARD IDENTIFICATION

**Emergency Overview:** Ingestion & Skin. TARGET ORGAN(S): Eyes, skin

### **Potential Health Effects**

**Eyes:** Contact may cause irritation

**Skin:** Contact may cause staining.

**Ingestion:** Irritant. May cause gastrointestinal irritation.

**Inhalation:** NA

**Chronic Exposure:** No Data.

**Carcinogenicity:** NTP No IARC No OSHA No

**Medical Conditions Aggravated by Exposure:** Eye and skin conditions

## SECTION 4 – FIRST AID MEASURES

**Eyes:** Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician.

**Skin:** Wash skin thoroughly with soap and water.

**Ingestion:** Give large amounts of water. Call physician. Induce vomiting under direction of physician. DO NOT induce vomiting or give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.

**Inhalation:** NA

## SECTION 5 – FIREFIGHTING MEASURES

**Flash Point:** NA°C/NA°F

**Autoignition Temp:** NA°C/NA°F

**Hazardous Products of Combustion:** No Data.

**Flammable Limits in Air:** LEL: NA UEL: NA

**Extinguishing Media:** NA

**Fire and Explosion Hazards:** May emit toxic fumes of sulfur oxides, carbon oxides, nitrogen oxides.

**Special Firefighting Procedures:** Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** Safety Glasses.

**Protective Clothing:** General purpose gloves, lab coat

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> BY VOLUME: 99%
<b>Color:</b> Clear, orange	<b>Vapor Density [air =1]:</b> .6	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> None	<b>Vapor Pressure:</b> (mm Hg): 17	<b>Specific Gravity:</b> 1
<b>Boiling Point:</b> 100°C/212°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> 8.5

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<u>Hazardous Ingredients</u>	<u>CAS #</u>	<u>EINECS #</u>	<u>LD 50 of Ingredient</u> (Specify Species)	<u>LC50 of Ingredient</u> (Specify Species)
No Data.				

## SECTION 12 – ECOLOGICAL INFORMATION

<u>Hazardous Ingredients</u>	<u>Aquatic Toxicity Data</u>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Incineration or other method to comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: No Data.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)	Not Regulated.			
<b>IMO</b> (Water)	No Data.			
<b>ICAO</b> (Air)	No Data.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	No Data.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 0 Flammability: 0 Reactivity: 0 Specific: NA

**SECTION 16 – OTHER INFORMATION**

No Data.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.	<b>Phone Number</b> (314) 469-7000 / (800) 554-5499	<b>CHEMTREC</b> (800) 424-9300		
<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/22/07
<b>Product Name</b> Phenolphthalein Indicator	<b>Product Number</b> 4798-2 & W017-0	<b>Product Use</b> Alcoholic organic dye solution for water tests.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<b>Hazardous Ingredients</b>	<b>% By Wt.</b>	<b>CAS Number</b>	<b>TLV</b>	<b>PEL</b>
Isopropyl alcohol	<50	67-63-0	980 mg/m3	980 mg/m3
Phenolphthalein	<1	77-09-8		
Deionized water	to 100	7732-18-5		

## SECTION 3 – HAZARD IDENTIFICATION

<b>Emergency Overview:</b> ROUTE(S) OF ENTRY: Inhalation, Ingestion & Skin. TARGET ORGAN(S): Eyes, skin, respiratory tract, kidneys, liver, adrenal gland, reproductive organs.
<b>Potential Health Effects</b>
<b>Eyes:</b> Irritant.
<b>Skin:</b> Irritant.
<b>Ingestion:</b> Irritant. May cause severe gastrointestinal disturbance.
<b>Inhalation:</b> Irritant. May cause narcosis.
<b>Chronic Exposure:</b> No Data.
<b>Carcinogenicity:</b> NTP Yes IARC Yes OSHA Yes
<b>Medical Conditions Aggravated by Exposure:</b> Eye, skin, and respiratory conditions.

## SECTION 4 – FIRST AID MEASURES

<b>Eyes:</b> Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician.
<b>Skin:</b> Wash skin thoroughly with soap and water.
<b>Ingestion:</b> Give large amounts of water. Call physician. Induce vomiting under direction of physician. DO NOT induce vomiting or give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.
<b>Inhalation:</b> Remove to fresh air. Call physician.

## SECTION 5 – FIREFIGHTING MEASURES

<b>Flash Point:</b> 17°C/62°F
<b>Autoignition Temp:</b> No Data.°C/No Data.°F
<b>Hazardous Products of Combustion:</b> No Data.
<b>Flammable Limits in Air:</b> LEL: 2% UEL: 12%
<b>Extinguishing Media:</b> Dry chemical, carbon dioxide, water spray, or alcohol foam
<b>Fire and Explosion Hazards:</b> Vapors flammable. May be ignited by heat, sparks, or flames. May emit toxic fumes.
<b>Special Firefighting Procedures:</b> Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing. Cool exposed containers with water spray. Knock down vapors with water spray.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry, well-ventilated area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** safety glasses

**Protective Clothing:** General purpose gloves, lab coat.

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> BY VOLUME: 99%
<b>Color:</b> Clear, colorless	<b>Vapor Density [air =1]:</b> 1.6	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> Alcohol	<b>Vapor Pressure:</b> (mm Hg): 25	<b>Specific Gravity:</b> .9
<b>Boiling Point:</b> 82°C/180°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> NA

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures. Protect from sparks, flames, oxidizers.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient</b> (Specify Species)	<b>LC50 of Ingredient</b> (Specify Species)
Isopropyl alcohol	67-63-0		LD50(oral-rat): 5840 mg/kg	
Phenolphthalein	77-09-8		LD50(oral-rat): >1 gm/kg	

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Incineration or other method to comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: DOT Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)				ORM-D
<b>IMO</b> (Water)	No Data.			
<b>ICAO</b> (Air)	No Data.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	No Data.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 1 Flammability: 3 Reactivity: 0 Specific: NA

**SECTION 16 – OTHER INFORMATION**

No Data.

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# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.	<b>Phone Number</b> (314) 469-7000 / (800) 554-5499	<b>CHEMTREC</b> (800) 424-9300		
<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/23/07
<b>Product Name</b> Phosphonate Titrating Solution	<b>Product Number</b> 4798-2 & 4804-0	<b>Product Use</b> Inorganic salt solution for water testing.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>% By Wt.</u>	<u>CAS Number</u>	<u>TLV</u>	<u>PEL</u>
Thorium nitrate	<1	13823-29-5	NE	NE
Deionized water	to 100	7732-18-5	NE	NE

## SECTION 3 – HAZARD IDENTIFICATION

<b>Emergency Overview:</b> ROUTE(S) OF ENTRY: Ingestion & Skin. TARGET ORGAN(S): Eyes, skin
<b>Potential Health Effects</b>
<b>Eyes:</b> Irritant.
<b>Skin:</b> Irritant.
<b>Ingestion:</b> Irritant. Ingestion of large amounts may be carcinogenic due to radioactivity.
<b>Inhalation:</b> NA
<b>Chronic Exposure:</b> No Data.
<b>Carcinogenicity:</b> NTP No IARC No OSHA No
<b>Medical Conditions Aggravated by Exposure:</b> Eye and skin conditions.

## SECTION 4 – FIRST AID MEASURES

<b>Eyes:</b> Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician.
<b>Skin:</b> Wash skin thoroughly with soap and water.
<b>Ingestion:</b> Give large amounts of water. Call physician. Induce vomiting under direction of physician. DO NOT induce vomiting or give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.
<b>Inhalation:</b> NA

## SECTION 5 – FIREFIGHTING MEASURES

<b>Flash Point:</b> NA°C/NA°F
<b>Autoignition Temp:</b> NA°C/NA°F
<b>Hazardous Products of Combustion:</b> No Data.
<b>Flammable Limits in Air:</b> LEL: NA UEL: NA
<b>Extinguishing Media:</b> No Data.
<b>Fire and Explosion Hazards:</b> Residue on evaporation is a strong oxidizer. May emit toxic fumes of nitrogen oxides.
<b>Special Firefighting Procedures:</b> Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** safety glasses

**Protective Clothing:** General purpose gloves, lab coat

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> BY VOLUME: 99%
<b>Color:</b> Clear, colorless	<b>Vapor Density [air =1]:</b> .6	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> None	<b>Vapor Pressure:</b> (mm Hg): 17	<b>Specific Gravity:</b> 1
<b>Boiling Point:</b> 100°C/212°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> 3.1

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures. Contact with reducing agents.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient</b> (Specify Species)	<b>LC50 of Ingredient</b> (Specify Species)
Thorium nitrate	13823-29-5		LD50(ori-mus): 1760 mg/kg	

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** To comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: Not Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)	Not Regulated.			
<b>IMO</b> (Water)	Not Regulated.			
<b>ICAO</b> (Air)	Not Regulated.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	No Data.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 1 Flammability: 0 Reactivity: 0 Specific: NA

**SECTION 16 – OTHER INFORMATION**

SPECIFIC ACTIVITY: 0.0000000508 uCi/g

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.	<b>Phone Number</b> (314) 469-7000 / (800) 554-5499	<b>CHEMTREC</b> (800) 424-9300		
<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/23/07
<b>Product Name</b> Silver Nitrate Reagent	<b>Product Number</b> 4798-2 & W017-0	<b>Product Use</b> Inorganic salt solution for water testing.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>% By Wt.</u>	<u>CAS Number</u>	<u>TLV</u>	<u>PEL</u>
Silver nitrate	<5	7761-88-8	TLV: .01 mg/m <sup>3</sup> (as silver) STEL: NE	.01 mg/m <sup>3</sup> (as silver)
Deionized water	to 100	7732-18-5		

## SECTION 3 – HAZARD IDENTIFICATION

**Emergency Overview:** ROUTE(S) OF ENTRY: Ingestion & Skin. TARGET ORGAN(S): Eyes, skin

### Potential Health Effects

**Eyes:** Irritant. Contact can cause severe irritation.

**Skin:** Irritant. Contact causes staining.

**Ingestion:** Irritant. May cause gastrointestinal irritation, abdominal pain.

**Inhalation:** NA

**Chronic Exposure:** No Data.

**Carcinogenicity:** NTP No IARC No OSHA No

**Medical Conditions Aggravated by Exposure:** Eye and skin conditions

## SECTION 4 – FIRST AID MEASURES

**Eyes:** Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician.

**Skin:** Wash skin thoroughly with soap and water.

**Ingestion:** Give large amounts of water. Call physician. Induce vomiting under direction of physician. DO NOT induce vomiting or give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.

**Inhalation:** NA

## SECTION 5 – FIREFIGHTING MEASURES

**Flash Point:** NA°C/NA°F

**Autoignition Temp:** No Data.°C/No Data.°F

**Hazardous Products of Combustion:** No Data.

**Flammable Limits in Air:** LEL: NA UEL: NA

**Extinguishing Media:** Water only

**Fire and Explosion Hazards:** May ignite other combustible materials. Reacts with organics to produce flammable products. May emit toxic fumes of nitrogen oxides.

**Special Firefighting Procedures:** Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** Safety glasses

**Protective Clothing:** General purpose gloves, lab coat

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> BY VOLUME: 98%
<b>Color:</b> Clear, colorless	<b>Vapor Density [air =1]:</b> .6	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> None	<b>Vapor Pressure:</b> (mm Hg): 17	<b>Specific Gravity:</b> 1
<b>Boiling Point:</b> 100°C/212°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> 4.4

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures. Contact with organics, combustible materials.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient</b> (Specify Species)	<b>LC50 of Ingredient</b> (Specify Species)
Silver nitrate	7761-88-8		LD50(ori-mus): 50 mg/kg LDLo(unk-man): 29 mg/kg	

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Incineration or other method to comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: DOT Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)				ORM-D
<b>IMO</b> (Water)	No Data.			
<b>ICAO</b> (Air)	No Data.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	Silver nitrate is subject to the reporting requirements of SARA Title III Section 313 and 40 CFR 372.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 1 Flammability: 0 Reactivity: 0 Specific: OX

**SECTION 16 – OTHER INFORMATION**

No Data.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.	<b>Phone Number</b> (314) 469-7000 / (800) 554-5499	<b>CHEMTREC</b> (800) 424-9300		
<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/22/07
<b>Product Name</b> Sulfuric Acid	<b>Product Number</b> 4804-0, 4798-2 & W017-0	<b>Product Use</b> Inorganic acid solution for water testing.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>% By Wt.</u>	<u>CAS Number</u>	<u>TLV</u>	<u>PEL</u>
Sulfuric acid	5	7664-93-9	TLV: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>	PEL: 1 mg/m <sup>3</sup>
Deionized water	to 100	7732-18-5		

## SECTION 3 – HAZARD IDENTIFICATION

<b>Emergency Overview:</b> ROUTE(S) OF ENTRY: Ingestion & Skin. TARGET ORGAN(S): Eyes, skin.
<b>Potential Health Effects</b>
<b>Eyes:</b> Corrosive. Contact may cause severe burns.
<b>Skin:</b> Corrosive. Contact may cause severe burns.
<b>Ingestion:</b> Corrosive. May cause severe gastrointestinal irritation, burns of mouth, esophagus, and stomach.
<b>Inhalation:</b> NA
<b>Chronic Exposure:</b> No Data.
<b>Carcinogenicity:</b> NTP No IARC No OSHA No
<b>Medical Conditions Aggravated by Exposure:</b> Eye and skin conditions

## SECTION 4 – FIRST AID MEASURES

<b>Eyes:</b> Immediately flush eyes and skin with water for 20 minutes or until chemical is removed. Call physician.
<b>Skin:</b> Wash skin thoroughly with soap and water.
<b>Ingestion:</b> Give large amounts of water or large amounts of water with milk of magnesia. Call physician. DO NOT INDUCE VOMITING. DO NOT give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.
<b>Inhalation:</b> NA

## SECTION 5 – FIREFIGHTING MEASURES

<b>Flash Point:</b> NA°C/NA°F
<b>Autoignition Temp:</b> No Data.°C/No Data.°F
<b>Hazardous Products of Combustion:</b> No Data.
<b>Flammable Limits in Air:</b> LEL: NA UEL: NA
<b>Extinguishing Media:</b> Dry chemical, carbon dioxide
<b>Fire and Explosion Hazards:</b> May react violently with water. May react with metals to produce hydrogen gas. May ignite combustible materials. May emit toxic fumes of sulfur oxides.
<b>Special Firefighting Procedures:</b> Wear self-contained (positive pressure if available) breathing apparatus and special protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Neutralize with soda ash. Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** safety glasses, face shield

**Protective Clothing:** Rubber gloves, lab coat, rubber apron

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> 100%
<b>Color:</b> Clear, colorless	<b>Vapor Density [air =1]:</b> .6	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> None	<b>Vapor Pressure:</b> (mm Hg): 17	<b>Specific Gravity:</b> 1.03
<b>Boiling Point:</b> 110°C/230°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> 0.6

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures. Contact with strong alkali, metals.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient</b> (Specify Species)	<b>LC50 of Ingredient</b> (Specify Species)
Sulfuric acid	7664-93-9		LD50(oral-rat): 2140 mg/kg	

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Incineration or other method to comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: DOT Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)				ORM-D
<b>IMO</b> (Water)	No Data.			
<b>ICAO</b> (Air)	No Data.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	No Data.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 3 Flammability: 0 Reactivity: 1 Special: NA

**SECTION 16 – OTHER INFORMATION**

No Data.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.	<b>Phone Number</b> (314) 469-7000 / (800) 554-5499	<b>CHEMTREC</b> (800) 424-9300		
<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/22/07
<b>Product Name</b> Thiosulfate	<b>Product Number</b> 4798-2 & 4804-0	<b>Product Use</b> Inorganic salt solution for water testing.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>% By Wt.</u>	<u>CAS Number</u>	<u>TLV</u>	<u>PEL</u>
Sodium thiosulfate	<5	7772-98-7		
Nonhazardous ingredients	<1	NA		
Deionized water	to 100	7732-18-5		

## SECTION 3 – HAZARD IDENTIFICATION

<b>Emergency Overview:</b> ROUTE(S) OF ENTRY: Ingestion & Skin. TARGET ORGAN(S): Eyes, skin
<b>Potential Health Effects</b>
<b>Eyes:</b> Contact may cause irritation.
<b>Skin:</b> Contact may cause irritation.
<b>Ingestion:</b> Large quantities may cause gastrointestinal irritation.
<b>Inhalation:</b> NA
<b>Chronic Exposure:</b> No Data.
<b>Carcinogenicity:</b> NTP No IARC No OSHA No
<b>Medical Conditions Aggravated by Exposure:</b> Eye and skin conditions.

## SECTION 4 – FIRST AID MEASURES

<b>Eyes:</b> Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician.
<b>Skin:</b> Wash skin thoroughly with soap and water.
<b>Ingestion:</b> Give large amounts of water. Call physician. Induce vomiting under direction of physician. DO NOT induce vomiting or give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.
<b>Inhalation:</b> NA

## SECTION 5 – FIREFIGHTING MEASURES

<b>Flash Point:</b> NA°C/NA°F
<b>Autoignition Temp:</b> No Data.°C/No Data.°F
<b>Hazardous Products of Combustion:</b> No Data.
<b>Flammable Limits in Air:</b> LEL: NA UEL: NA
<b>Extinguishing Media:</b> NA
<b>Fire and Explosion Hazards:</b> May emit toxic fumes of sulfur oxides, hydrogen sulfide.
<b>Special Firefighting Procedures:</b> Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Absorb with vermiculite or other inert material. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** safety glasses

**Protective Clothing:** General purpose gloves, lab coat

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No Data.°C/No Data.°F	<b>% Volatile by Weight:</b> BY VOLUME: 97%
<b>Color:</b> Clear, colorless	<b>Vapor Density [air =1]:</b> .6	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> None	<b>Vapor Pressure:</b> (mm Hg): 17	<b>Specific Gravity:</b> 1
<b>Boiling Point:</b> 100°C/212°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> 9.6

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures. Contact with acids, strong oxidizers.

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient</b> (Specify Species)	<b>LC50 of Ingredient</b> (Specify Species)
Sodium thiosulfate	7772-98-7		LD50(oral-rat): >5000 mg/kg	

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Incineration or other method to comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: Not Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)	Not Regulated.			
<b>IMO</b> (Water)	Not Regulated.			
<b>ICAO</b> (Air)	Not Regulated.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	No Data.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 0 Flammability: 0 Reactivity: 0 Specific: NA

**SECTION 16 – OTHER INFORMATION**

No Data.

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# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.	<b>Phone Number</b> (314) 469-7000 / (800) 554-5499	<b>CHEMTREC</b> (800) 424-9300		
<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 5/23/7
<b>Product Name</b> XO Indicator Powder	<b>Product Number</b> 4798-2 & 4804-0	<b>Product Use</b> Inorganic salt/organic dye mixture for water testing.		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>% By Wt.</u>	<u>CAS Number</u>	<u>TLV</u>	<u>PEL</u>
Potassium chloride	>98	7447-40-7	NE	NE
Nonhazardous ingredients	<1	NA	NE	NE

## SECTION 3 – HAZARD IDENTIFICATION

<b>Emergency Overview:</b> ROUTE(S) OF ENTRY: Inhalation, Ingestion & Skin. TARGET ORGAN(S): Eyes, skin, respiratory tract
<b>Potential Health Effects</b>
<b>Eyes:</b> Irritant
<b>Skin:</b> Irritant. Contact may cause staining.
<b>Ingestion:</b> Irritant. May cause gastrointestinal irritation.
<b>Inhalation:</b> Irritant
<b>Chronic Exposure:</b> No Data.
<b>Carcinogenicity:</b> NTP No IARC No OSHA No
<b>Medical Conditions Aggravated by Exposure:</b> Eye, skin, and respiratory conditions

## SECTION 4 – FIRST AID MEASURES

<b>Eyes:</b> Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician.
<b>Skin:</b> Wash skin thoroughly with soap and water.
<b>Ingestion:</b> Give large amounts of water. Call physician. Induce vomiting under direction of physician. DO NOT induce vomiting or give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.
<b>Inhalation:</b> Remove to fresh air. Call physician.

## SECTION 5 – FIREFIGHTING MEASURES

<b>Flash Point:</b> NA°C/NA°F
<b>Autoignition Temp:</b> NA°C/NA°F
<b>Hazardous Products of Combustion:</b> No Data.
<b>Flammable Limits in Air:</b> LEL: NA UEL: NA
<b>Extinguishing Media:</b> NA
<b>Fire and Explosion Hazards:</b> May emit toxic fumes of chlorine.
<b>Special Firefighting Procedures:</b> Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Sweep up. Avoid raising dust. Containerize for later disposal.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

**Storage Requirements:** Cool, dry area. Avoid direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** No Data.

**Eye Protection:** safety glasses.

**Protective Clothing:** General purpose gloves, lab coat, dust mask

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** No Data.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Solid	<b>Freezing Point:</b> NA°C/NA°F	<b>% Volatile by Weight:</b> No Data.%
<b>Color:</b> Purple crystals	<b>Vapor Density [air =1]:</b> NA	<b>Evaporation Rate:</b> NA
<b>Odor:</b> None	<b>Vapor Pressure:</b> NA	<b>Specific Gravity:</b> 2
<b>Boiling Point:</b> NA°C/NA°F	<b>Solubility in Water:</b> Soluble	<b>pH (concentrate):</b> NA

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** No Data.

**Hazardous Polymerization:** No Data.

**Incompatibilities:** No Data.

**Reactive Conditions to avoid:** Extreme heat, temperatures. Contact with strong oxidizers, bromine trifluoride, (sulfuric acid + potassium permanganate).

**Decomposition Products:** No Data.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient (Specify Species)</b>	<b>LC50 of Ingredient (Specify Species)</b>
Potassium chloride	7447-40-7		LDLo(oral-hmn): 500 mg/kg	

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No Data.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Incineration or other method to comply with all local, state, and federal regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

Special Shipping Information: Not Regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)	Not Regulated.			
<b>IMO</b> (Water)	Not Regulated.			
<b>ICAO</b> (Air)	Not Regulated.			

**SECTION 15 – REGULATORY INFORMATION**

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	No Data.
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	No Data.
<b>OSHA:</b> (Occupational Safety & Health Administration)	No Data.
<b>TSCA:</b> (Toxic Substance Control Act)	No Data.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health: 0 Flammability: 0 Reactivity: 0 Specific: NA

**SECTION 16 – OTHER INFORMATION**

No Data.

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