



SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	Degreasing Solvent-LV (Low VOC)(Part# 4162-17)
Other means of identification	Not available
Recommended use	Degreaser
Recommended restrictions	None known.
Manufacturer information	Nu-Calgon 2611 Schuetz Road St. Louis, MO 63043 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEMTREC)
Supplier	See above.

2. Hazards Identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	
Label elements		



Signal word Danger

Hazard statement Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Harmful if inhaled. May be fatal if swallowed and enters airways.

Precautionary statement

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves/eye protection/face protection. Wash thoroughly after handling. Avoid breathing mist or vapor. Use only outdoors or in a well-ventilated area.

Response

In case of fire: Use appropriate media to extinguish.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation occurs: Get medical advice/attention. Specific treatment (see this label). Take off contaminated clothing and wash it before reuse.
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.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.

Storage

Store in a well-ventilated place. Keep cool.
Keep container tightly closed. Store locked up.

Disposal

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

WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC) None known

WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC) None known

Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Distillates (petroleum), light hydrotreated		64742-47-8	40-70
Benzene, 1-chloro-4(trifluoromethyl)-		98-56-6	15-30
o-chlorotoluene		95-49-8	15-30

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

4. First Aid Measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation occurs: Get medical advice/attention. Specific treatment (see information on this label). Take off contaminated clothing and wash it before reuse.
Eye contact	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.
Ingestion	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Take off all contaminated clothing immediately. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. Keep away from sources of ignition. No smoking. Avoid contact with eyes and skin. Wear rubber gloves and safety glasses with side shields. Keep out of reach of children.

5. Fire Fighting Measures

Suitable extinguishing media	Carbon dioxide. Dry chemical. Water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. Firefighters should wear a self-contained breathing apparatus.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Fire-fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Flammable liquid and vapor.
Hazardous combustion products	May include and are not limited to: Hydrogen fluoride. Oxides of carbon. Hydrogen chloride.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Avoid inhalation of vapors. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewers, basements or confined areas. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

Environmental precautions

Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling

Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using do not eat or drink. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. Keep container tightly closed.

Conditions for safe storage, including any incompatibilities

Store locked up. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a closed container away from incompatible materials. Store in a well-ventilated place. Store in cool place. Keep in an area equipped with sprinklers. Keep out of reach of children. Do not store at temperatures above 120°F (49°C).

8. Exposure Controls/Personal Protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	TWA	200 mg/m ³	Vapor.
o-chlorotoluene (CAS 95-49-8)	TWA	259 mg/m ³ 50 ppm	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	TWA	200 mg/m ³	Non-aerosol.
o-chlorotoluene (CAS 95-49-8)	TWA	50 ppm	

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
o-chlorotoluene (CAS 95-49-8)	TWA	50 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
o-chlorotoluene (CAS 95-49-8)	STEL	75 ppm
	TWA	50 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
o-chlorotoluene (CAS 95-49-8)	TWA	259 mg/m3
		50 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
o-chlorotoluene (CAS 95-49-8)	TWA	50 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	TWA	100 mg/m3
o-chlorotoluene (CAS 95-49-8)	STEL	375 mg/m3
		75 ppm
	TWA	250 mg/m3 50 ppm

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

Exposure guidelines**Canada - Alberta OELs: Skin designation**

Distillates (petroleum), light hydrotreated (CAS 64742-47-8) Can be absorbed through the skin.

Canada - British Columbia OELs: Skin designation

Distillates (petroleum), light hydrotreated (CAS 64742-47-8) Can be absorbed through the skin.

Canada - Saskatchewan OELs: Skin designation

Distillates (petroleum), light hydrotreated (CAS 64742-47-8) Can be absorbed through the skin.

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.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Rubber gloves. Confirm with a reputable supplier first.

Other Wear appropriate chemical resistant clothing. As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

Thermal hazards Not applicable.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance	Clear
Physical state	Liquid.
Form	Liquid
Color	Clear
Odor	Solvent
Odor threshold	Not available.
pH	Not available

Melting point/freezing point	Not available.
Initial boiling point and boiling range	282 - 349 °F (138.89 - 176.11 °C)
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	105.0 °F (40.6 °C) Pensky-Martens Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	0.8
Explosive limit - upper (%)	5.7
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Negligible
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Bulk density	0.905 g/cm ³

10. Stability and Reactivity

Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Do not mix with other chemicals.
Incompatible materials	Acids. Oxidizers. Reducing agents.
Hazardous decomposition products	May include and are not limited to: Hydrogen chloride. Hydrogen fluoride. Oxides of carbon.

11. Toxicological Information

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Information on likely routes of exposure	
Ingestion	May be fatal if swallowed and enters airways.
Inhalation	Harmful if inhaled. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Prolonged inhalation may be harmful. May be fatal if swallowed and enters airways.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity	Harmful if inhaled. Narcotic effects. May cause respiratory irritation. May be fatal if swallowed and enters airways.
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Components	Species	Test Results
Benzene, 1-chloro-4(trifluoromethyl)- (CAS 98-56-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Mouse	20000 mg/m ³ /4H
	Rat	33 mg/l/4h

Components	Species	Test Results
<i>Oral</i> LD50	Mouse	11500 mg/kg
	Rat	13000 mg/kg
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i> LC50	Rat	> 2.8 mg/l/4h
<i>Oral</i> LD50	Rat	> 5000 mg/kg
o-chlorotoluene (CAS 95-49-8)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 7940 mg/kg
	Rat	> 1083 mg/kg
<i>Inhalation</i> LC50	Rat	37517 mg/m3, 4 hours
<i>Oral</i> LD50	Rat	> 1600 mg/kg 5700 mg/kg 3227 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Corneal opacity value	Not available.	
Iris lesion value	Not available.	
Conjunctival reddening value	Not available.	
Conjunctival oedema value	Not available.	
Recover days	Not available.	
Respiratory or skin sensitization		
Canada - Alberta OELs: Irritant		
o-chlorotoluene (CAS 95-49-8)		Irritant
Respiratory sensitization	Not available.	
Skin sensitization	Prolonged or repeated exposure can cause drying, defatting and dermatitis.	
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.	
Carcinogenicity	Non-hazardous by WHMIS/OSHA criteria.	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		
Reproductive toxicity	Non-hazardous by WHMIS/OSHA criteria.	
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.	
Specific target organ toxicity - single exposure	Respiratory tract irritation. Narcotic effects.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not available.	
Chronic effects	Prolonged inhalation may be harmful.	

12. Ecological Information

Ecotoxicity	See below		
Ecotoxicological data			
Components	Species		Test Results
Benzene, 1-chloro-4(trifluoromethyl)- (CAS 98-56-6)			
Crustacea	EC50	Daphnia	3.68 mg/L, 48 Hours
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/L, 96 hours
o-chlorotoluene (CAS 95-49-8)			
Aquatic			
Fish	LC50	Bleak (Alburnus alburnus)	6.7 - 9.1 mg/L, 96 hours
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential	No data available.		
Mobility in soil	No data available.		
Mobility in general	Not available.		
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		

13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification	In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue.
U.S. Department of Transportation (DOT)	
Basic shipping requirements:	
UN number	UN1993
Proper shipping name	Flammable liquids, n.o.s.
Technical name	Distillates (petroleum), light hydrotreated
Hazard class	Limited Quantity - US
Packing group	III
Special provisions	B1, B52, IB3, T4, TP1, TP29
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	242
Transportation of Dangerous Goods (TDG - Canada)	
Basic shipping requirements:	
UN number	UN1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Technical name	Distillates (petroleum), light hydrotreated
Hazard class	Limited Quantity - Canada
Packing group	III
Special provisions	16, 150
IATA/ICAO (Air)	
Basic shipping requirements:	
UN number	UN1993

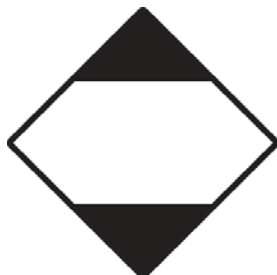
Proper shipping name Flammable liquid, n.o.s.
Technical name Distillates (petroleum), light hydrotreated
Hazard class Limited Quantity - IATA
Packing group III

IMDG (Marine Transport)

Basic shipping requirements:

UN number UN1993
Proper shipping name FLAMMABLE LIQUID, N.O.S.
Technical name Distillates (petroleum), light hydrotreated
Hazard class Limited Quantity - IMDG
Packing group III

DOT; IMDG; TDG



IATA



15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canada NPRI VOCs with Additional Reporting Requirements: Mass reporting threshold/Identification Number

Distillates (petroleum), light hydrotreated (CAS 64742-47-8) 1 TONNES

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Not applicable

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

Benzene, 1-chloro-4(trifluoromethyl)- (CAS 98-56-6) 1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

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

Not regulated.

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

Not regulated.

US state regulations**US - California Hazardous Substances (Director's): Listed substance**

o-chlorotoluene (CAS 95-49-8) Listed.

US - Minnesota Haz Subs: Listed substance

o-chlorotoluene (CAS 95-49-8) Listed.

US - New Jersey RTK - Substances: Listed substance

Benzene, 1-chloro-4(trifluoromethyl)- (CAS 98-56-6)

o-chlorotoluene (CAS 95-49-8)

US - Texas Effects Screening Levels: Listed substance

Benzene, 1-chloro-4(trifluoromethyl)- (CAS 98-56-6) Listed.

Distillates (petroleum), light hydrotreated (CAS 64742-47-8) Listed.

o-chlorotoluene (CAS 95-49-8) Listed.

US. Massachusetts RTK - Substance List

Distillates (petroleum), light hydrotreated (CAS 64742-47-8)

o-chlorotoluene (CAS 95-49-8)

US. New Jersey Worker and Community Right-to-Know Act

Distillates (petroleum), light hydrotreated (CAS 64742-47-8)

US. Pennsylvania Worker and Community Right-to-Know Law

Distillates (petroleum), light hydrotreated (CAS 64742-47-8)

o-chlorotoluene (CAS 95-49-8)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Inventory status

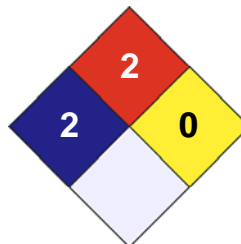
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 2
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

**Disclaimer**

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date

16-August-2016

Version #

01

Effective date

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Prepared by
Other information

Nu-Calgon Technical Service Phone: (314) 469-7000

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.