



# SAFETY DATA SHEET

## 1. Product and Company Identification

<b>Product identifier</b>	<b>Special HD CalClean (4143-01, 4143-06, 4143-08, 4823-08)</b>
<b>Other means of identification</b>	Not available
<b>Recommended use</b>	Heavy duty cleaner
<b>Recommended restrictions</b>	None known.
<b>Manufacturer information</b>	Nu-Calgon 2611 Schuetz Road St. Louis, MO 63043 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEMTREC)
<b>Supplier</b>	See above.

## 2. Hazards Identification

<b>Physical hazards</b>	Corrosive to metals	Category 1
<b>Health hazards</b>	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
<b>Environmental hazards</b>	Not classified.	
<b>WHMIS 2015 defined hazards</b>	Not classified	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	May be corrosive to metals. Causes severe skin burns and eye damage.
<b>Precautionary statement</b>	
<b>Prevention</b>	Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection. Keep only in original packaging.
<b>Response</b>	Absorb spillage to prevent material-damage. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. Specific treatment (see information on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Storage</b>	Store locked up. Store in a corrosion resistant container with a resistant inner liner.
<b>Disposal</b>	Dispose of container in accordance with local, regional, national and international regulations.
<b>WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)</b>	None known
<b>WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)</b>	None known
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

## 3. Composition/Information on Ingredients

### Mixture

<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>%</b>
Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy-		34398-01-1	1-5*
Potassium hydroxide		1310-58-3	1-5*
Sodium lauriminodipropionate		14960-06-6	1-5*

Chemical name	Common name and synonyms	CAS number	%
Sodium metasilicate		6834-92-0	3-7*
Sodium tripolyphosphate		7758-29-4	3-7*

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.  
\*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. First Aid Measures

<b>Inhalation</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
<b>Skin contact</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. Specific treatment (see information on this label).
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
<b>Ingestion</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
<b>Most important symptoms/effects, acute and delayed</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

#### 5. Fire Fighting Measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of nitrogen. Oxides of carbon.

#### 6. Accidental Release Measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Prevent entry into waterways, sewer, basements or confined areas.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. 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.
<b>Environmental precautions</b>	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Do not discharge into lakes, streams, ponds or public waters.

## 7. Handling and Storage

<b>Precautions for safe handling</b>	Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.
<b>Conditions for safe storage, including any incompatibilities</b>	Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Store in a corrosion resistant container with a resistant inner liner.

## 8. Exposure Controls/Personal Protection

### Occupational exposure limits

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

Components	Type	Value
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Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3
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#### Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
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Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3
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#### Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
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Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3
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#### Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
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Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3
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#### Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
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Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3
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#### Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Components	Type	Value
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Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3
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#### US. ACGIH Threshold Limit Values

Components	Type	Value
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Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3
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#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
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Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3
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**Biological limit values** No biological exposure limits noted for the ingredient(s).

**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.

#### Skin protection

**Hand protection** Impervious gloves. Confirm with reputable supplier first.

**Other** As required by employer code. Use of an impervious apron is recommended.

**Respiratory protection** Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

**Thermal hazards** Not applicable.

**General hygiene considerations**

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. When using do not eat or drink.

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**9. Physical and Chemical Properties**

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<b>Appearance</b>	Clear
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid
<b>Color</b>	Yellow
<b>Odor</b>	Fresh
<b>Odor threshold</b>	Not available.
<b>pH</b>	13.5
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Pour point</b>	Not available.
<b>Specific gravity</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available
<b>Flammability limit - upper (%)</b>	Not available
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Relative density</b>	9.36 lb/gal
<b>Solubility(ies)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.

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**10. Stability and Reactivity**

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<b>Reactivity</b>	This product may react with strong oxidizing agents. Reacts violently with acids.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Strong oxidizing agents. Acids.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.

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**11. Toxicological Information**

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<b>Routes of exposure</b>	Eye, Skin contact, Inhalation, Ingestion.
<b>Information on likely routes of exposure</b>	
<b>Ingestion</b>	Causes digestive tract burns. May cause stomach distress, nausea or vomiting.
<b>Inhalation</b>	May cause irritation to the respiratory system.
<b>Skin contact</b>	Causes severe skin burns.

**Eye contact**

Causes serious eye damage.

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

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

**Information on toxicological effects****Acute toxicity****Components****Species****Test Results**

Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy- (CAS 34398-01-1)

**Acute***Dermal*

LD50

Rabbit

&gt; 2000 mg/kg, West Penetone

*Inhalation*

LC50

Not available

*Oral*

LD50

Rabbit

&gt; 1400 mg/kg, Koch Membrane Systems

&gt; 2000 mg/kg, West Penetone

Rat

1700 mg/kg, West Penetone

Potassium hydroxide (CAS 1310-58-3)

**Acute***Dermal*

LD50

Not available

*Inhalation*

LC50

Not available

*Oral*

LD50

Rat

388 mg/kg, ECHA

365 mg/kg, ECHA

333 mg/kg, ECHA

273 mg/kg

Sodium lauriminodipropionate (CAS 14960-06-6)

**Acute***Dermal*

LD50

Rabbit

&gt; 20 g/kg, 24 Hours, ECHA

Rat

&gt; 2000 mg/kg, 24 Hours, ECHA

*Inhalation*

LC50

Not available

*Oral*

LD50

Rat

&gt; 10000 mg/kg

Sodium metasilicate (CAS 6834-92-0)

**Acute***Dermal*

LD50

Rat

&gt; 5000 mg/kg, 24 Hours

*Inhalation*

LC50

Rat

&gt; 2.1 mg/L, 4 Hours

*Oral*

LD50

Mouse

770 - 820 mg/kg, ECHA

666.7 - 1008.6 mg/kg, ECHA

2400 mg/kg, Patty's Industrial Hygiene and Toxicology

770 - 820 mg/kg, ECHA

666.7 - 1008.6 mg/kg, ECHA

661.5 - 896.3 mg/kg

Rat

1189.6 - 1530 mg/kg, ECHA

1152 - 1349 mg/kg, ECHA



**Ecotoxicological data**

Components	Species	Test Results
Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy- (CAS 34398-01-1)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 1.6 - 2.5 mg/L, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 3.2 - 5 mg/L, 96 hours
Potassium hydroxide (CAS 1310-58-3)		
<b>Aquatic</b>		
Fish	LC50	Western mosquitofish (Gambusia affinis) 80 mg/L, 96 hours
Sodium metasilicate (CAS 6834-92-0)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Ceriodaphnia dubia) 0.28 - 0.57 mg/L, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis) 1800 mg/L, 96 hours
Sodium tripolyphosphate (CAS 7758-29-4)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Ceriodaphnia dubia) 238.35 - 321.01 mg/L, 48 hours
<b>Persistence and degradability</b>	No data is available on the degradability of this product.	
<b>Bioaccumulative potential</b>	No data available.	
<b>Mobility in soil</b>	No data available.	
<b>Mobility in general</b>	Not available.	
<b>Other adverse effects</b>	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**

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	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).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. Transport Information**

<b>Transport of Dangerous Goods (TDG) Proof of Classification</b>	Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.
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**U.S. Department of Transportation (DOT)****Basic shipping requirements:**

<b>UN number</b>	UN3266
<b>Proper shipping name</b>	Corrosive liquid, basic, inorganic, n.o.s.
<b>Technical name</b>	Sodium metasilicate
<b>Hazard class</b>	8
<b>Packing group</b>	II
<b>Special provisions</b>	386, B2, IB2, T11, TP2, TP27
<b>Packaging exceptions</b>	<1L - Limited Quantity

**Transportation of Dangerous Goods (TDG - Canada)****Basic shipping requirements:**

<b>UN number</b>	UN3266
<b>Proper shipping name</b>	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
<b>Technical name</b>	Sodium metasilicate
<b>Hazard class</b>	8
<b>Packing group</b>	II
<b>Special provisions</b>	16
<b>Packaging exceptions</b>	<1L - Limited Quantity

**IATA/ICAO (Air)****Basic shipping requirements:**

UN number UN3266  
 Proper shipping name Corrosive liquid, basic, inorganic, n.o.s.  
 Technical name Sodium metasilicate  
 Hazard class 8  
 Packing group II

**IMDG (Marine Transport)****Basic shipping requirements:**

UN number UN3266  
 Proper shipping name CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.  
 Technical name Sodium metasilicate  
 Hazard class 8  
 Packing group II

**DOT****IATA; IMDG; TDG**


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**15. Regulatory Information**


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**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.

**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)**

Not regulated.

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

Potassium hydroxide (CAS 1310-58-3) 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 - No  
 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.

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130) Hazardous substance

US state regulations See below

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

Potassium hydroxide (CAS 1310-58-3) Listed.
Sodium tripolyphosphate (CAS 7758-29-4) Listed.

US - Illinois Chemical Safety Act: Listed substance

Potassium hydroxide (CAS 1310-58-3)
Sodium tripolyphosphate (CAS 7758-29-4)

US - Louisiana Spill Reporting: Listed substance

Potassium hydroxide (CAS 1310-58-3) Listed.
Sodium tripolyphosphate (CAS 7758-29-4) Listed.

US - Minnesota Haz Subs: Listed substance

Potassium hydroxide (CAS 1310-58-3) Listed.

US - New Jersey RTK - Substances: Listed substance

Potassium hydroxide (CAS 1310-58-3)

US - Texas Effects Screening Levels: Listed substance

Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy- (CAS 34398-01-1) Listed.
Potassium hydroxide (CAS 1310-58-3) Listed.
Sodium lauriminodipropionate (CAS 14960-06-6) Listed.
Sodium metasilicate (CAS 6834-92-0) Listed.
Sodium tripolyphosphate (CAS 7758-29-4) Listed.

US. Massachusetts RTK - Substance List

Potassium hydroxide (CAS 1310-58-3)
Sodium tripolyphosphate (CAS 7758-29-4)

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

Not regulated.

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

Potassium hydroxide (CAS 1310-58-3)
Sodium tripolyphosphate (CAS 7758-29-4)

US. Rhode Island RTK

Potassium hydroxide (CAS 1310-58-3)

US. California Proposition 65

This product is not subject to warning labeling under the California Proposition 65 regulation.

Inventory status

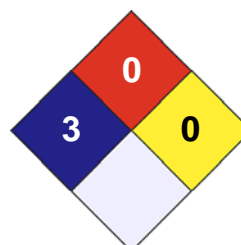
Table with 3 columns: Country(s) or region, Inventory name, On inventory (yes/no)\*. Rows include Canada (Domestic/Non-Domestic Substances List), and United States & Puerto Rico (Toxic Substances Control Act Inventory).

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

16. Other Information

LEGEND table mapping hazard levels: Severe (4), Serious (3), Moderate (2), Slight (1), Minimal (0).

Health and Safety hazard pictogram showing: HEALTH (3), FLAMMABILITY (0), 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.

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05

**Effective date**

12-March-2022

**Prepared by**

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

**Other information**

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