

SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	Calclean Special HD (4143-01, 4143-06, 4143-08, 4823-08)
Other means of identification	Not available
Recommended use	Heavy Duty Cleaner/Degreaser
Recommended restrictions	None known.
Manufacturer	Nu-Calgon 2008 Altom Court St. Louis, MO 63146 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. Hazards Identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements


Signal word	Danger
Hazard statement	May be corrosive to metals. Causes skin irritation. Causes serious eye damage.

Precautionary statement

Prevention	Keep only in original container. Wash thoroughly after handling. Wear protective gloves. Wear eye/face protection.
Response	If on skin: Wash with plenty of water. Specific treatment (see this label). If skin irritation occurs: Get medical advice/attention. Take off immediately all 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. Immediately call a poison center/doctor/. Absorb spillage to prevent material damage.
Storage	Store in corrosive resistant container with a resistant inner liner.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

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

Supplemental information Not applicable.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Sodium metasilicate		6834-92-0	3-7
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
Sodium tripolyphosphate		7758-29-4	1-5

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	Move to fresh air. Call a physician if symptoms develop or persist. If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Skin contact	If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Specific treatment (see product 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. Immediately call a poison center/doctor.
Ingestion	Rinse mouth. Do not induce vomiting. Get medical attention if symptoms occur. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible). 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

Suitable extinguishing media	Alcohol foam. Dry chemical. Carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	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	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
Hazardous combustion products	May include and are not limited to: Oxides of sulfur. Oxides of phosphorus. Oxides of carbon.
Explosion data	
Sensitivity to mechanical impact	Not available.
Sensitivity to static discharge	Not available.

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. Wear appropriate protective equipment and clothing during clean-up. 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.
Methods and materials for containment and cleaning up	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. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth and place into containers. 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. 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.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling	Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Do not get in eyes, on skin or on clothing. Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.
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Conditions for safe storage, including any incompatibilities

Store in corrosive resistant container with a resistant inner liner. Store in a closed container away from incompatible materials. Keep only in the original container. Store in a cool, dry place out of direct sunlight. Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits**US. ACGIH Threshold Limit Values**

Components	Type	Value
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Potassium hydroxide (CAS 1310-58-3)	TWA	2 mg/m3

Biological limit values

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

Exposure guidelines

Chemicals listed in section 3 that are not listed here do not have established limit values for ACGIH or OSHA PEL.

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 Not available.

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

Wear positive pressure self-contained breathing apparatus (SCBA). Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Avoid breathing mists or vapors.

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.

9. Physical and Chemical Properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid
Color	Opal Green
Odor	Fresh
Odor threshold	Not available.
pH	13.5
Melting point/freezing point	32 °F (0 °C)
Initial boiling point and boiling range	212 °F (100 °C)
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available
Flash point	None to boiling
Evaporation rate	Same as water
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available
Flammability limit - upper (%)	Not available
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available

Vapor density	Not available
Relative density	Not available.
Solubility(ies)	Complete
Auto-ignition temperature	Not available
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and Reactivity

Reactivity	Reacts violently with acids. This product may react with strong oxidizing agents. Corrosive to aluminum.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Reacts violently with strong acids. This product may react with oxidizing agents. Do not mix with other chemicals. Contact with incompatible materials. Hazardous vapours may be produced when mixed with chlorinated detergents or sanitizers.
Incompatible materials	Oxidizing agents. Acids. Acids.
Hazardous decomposition products	May include and are not limited to: Oxides of sulfur. Oxides of phosphorus. Oxides of carbon.

11. Toxicological Information

Routes of exposure	Inhalation. Ingestion. Skin contact. Eye contact.
Information on likely routes of exposure	
Ingestion	Expected to be a low ingestion hazard.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. This product is non-corrosive based on test data.
Eye contact	Causes serious eye damage.
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.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy- (CAS 34398-01-1)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Rat	1700 mg/kg
Potassium hydroxide (CAS 1310-58-3)		
Acute		
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Rat	214 mg/kg
Sodium lauriminodipropionate (CAS 14960-06-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	10200 mg/kg
<i>Inhalation</i>		
LC50		

Components	Species	Test Results
<i>Oral</i> LD50	Rat	31300 mg/kg
Sodium metasilicate (CAS 6834-92-0)		
Acute		
<i>Dermal</i> LD50	Not available	
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Mouse	2400 mg/kg
	Rat	1153 mg/kg
Sodium tripolyphosphate (CAS 7758-29-4)		
Acute		
<i>Dermal</i> LD50	Rabbit	7940 mg/kg
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Rat	3100 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 damage.	
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		
Respiratory sensitization	Not available.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	Non-hazardous by WHMIS/OSHA criteria.	
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.	
Carcinogenicity	Not classified or listed by IARC, NTP, OSHA and ACGIH.	
Reproductive toxicity	Non-hazardous by WHMIS/OSHA criteria.	
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not available.	
Chronic effects	Prolonged inhalation may be harmful.	
Further information	Not available.	
Name of Toxicologically Synergistic Products	Not available.	

12. Ecological Information

Ecotoxicity Components of this product have been identified as having potential environmental concerns. See below

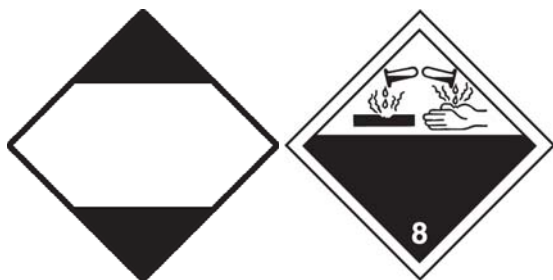
Components	Species	Test Results
Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy- (CAS 34398-01-1)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 1.6 - 2.5 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 3.2 - 5 mg/l, 96 hours
Potassium hydroxide (CAS 1310-58-3)		
Aquatic		
Fish	LC50	Western mosquitofish (Gambusia affinis) 80 mg/l, 96 hours
Sodium metasilicate (CAS 6834-92-0)		
Aquatic		
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)		
Aquatic		
Crustacea	EC50	Water flea (Ceriodaphnia dubia) 238.35 - 321.01 mg/l, 48 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. Dispose of contents/container in accordance with local/regional/national/international regulations.
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

General	DOT - 49 CFR 173.154 (d)(1) - Metal exemption Canada: 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. If applicable, the technical name and the classification of the product will appear below.
U.S. Department of Transportation (DOT)	Not regulated as dangerous goods.
Transportation of Dangerous Goods (TDG - Canada)	
Basic shipping requirements:	
UN number	UN3266
Proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium metasilicate)
Hazard class	Limited Quantity - Canada
Subsidiary hazard class	8
Packing group	III
Special provisions	16
Packaging exceptions	<5L - Limited Quantity, > 5L - Corrosive Placard



15. Regulatory Information

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

Canada WHMIS Ingredient Disclosure: Threshold limits

Potassium hydroxide (CAS 1310-58-3)	1 %
Sodium metasilicate (CAS 6834-92-0)	1 %

WHMIS status Controlled
WHMIS classification Class D - Division 2B, Class E - Corrosive Material

WHMIS labeling



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.

US CWA Section 311 Hazardous Substances: Listed substance

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

CERCLA Hazardous Substance List (40 CFR 302.4)

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

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

Not regulated.

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

Not regulated.

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

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

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

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

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

US - Illinois Chemical Safety Act: Listed substance

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

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) Listed.

US - New York Release Reporting: Hazardous Substances: Listed substance

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

US - Texas Effects Screening Levels: Listed substance

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

US. Pennsylvania RTK - Hazardous Substances

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

US. Rhode Island RTK

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

Inventory status

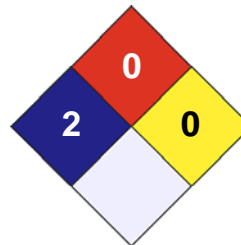
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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	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.

Issue date

14-May-2015

Effective date

14-May-2015

Expiry date

14-May-2018

Further information

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

Prepared by

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

Other information

This Safety Data Sheet was prepared to comply with the current OSHA Hazard Communication Standard (HCS) adoption of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).
This SDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.



MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Name Nu-Calgon Wholesaler, Inc.	Phone Number (314) 469-7000 / (800) 554-5499	CIEMTREC (800) 424-9300		
Street Address 2008 Altom Court	City St. Louis	State MO	Postal Code 63146-4151	Last Update 1/25/07
Product Name CalClean, Special HD	Product Number 4143	Product Use Heavy Duty Cleaner/Degreaser		EPA Registration # 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 Metasilicate	3-6%	6834-92-0	None Established	None Established
Nonionic Surfactant	1-3%	Proprietary	None Established	None Established
Potassium Hydroxide	1-3%	1310-58-3	2mg/m3 (TWA/STEL)	2mg/M3
Sodium Tripolyphosphate	3-6%	7758-29-4	None Established	None Established

SECTION 3 – HAZARD IDENTIFICATION

Emergency Overview: Alkaline detergent. Do not get in eyes, on skin or clothing. Avoid breathing spray or mist. Use only with adequate personal protection equipment.
Potential Health Effects
Eyes: Prolonged contact with eyes will cause severe irritation, possibly burns and permanent damage..
Skin: Contact with skin can cause moderate to severe irritation with pain, possibly produce chemical burns; irritation may be delayed.
Ingestion: Harmful if swallowed - may cause burns of the mouth, throat and stomach if ingested.
Inhalation: Inhalation of generated mists or spray may cause respiratory irritation or chemical burn of mouth, throat, and stomach.
Chronic Exposure: None currently known.
Carcinogenicity: None
Medical Conditions Aggravated by Exposure: An existing dermatitis.

SECTION 4 – FIRST AID MEASURES

Eyes: Flush eyes with water for at least 30 minutes and call a physician immediately. Speed of action is essential.
Skin: Remove contaminated clothing. Wash with large amounts of soap and water. If skin still feels slippery or if irritation persists, continue washing. Consult a physician in the case of any prolonged irritation
Ingestion: Do not induce vomiting. Immediately give large quantities of water or (preferably) milk and call a physician. Speed of action is essential.
Inhalation: Remove to fresh air. Start artificial respiration if necessary. Oxygen may be administered. Call a physician.

SECTION 5 – FIREFIGHTING MEASURES

Flash Point: None to Boiling °F
Autoignition Temp: N/A°C/N/A°F
Hazardous Products of Combustion: Burning may produce oxides of carbon and other substances.
Flammable Limits in Air: N/A
Extinguishing Media: Product is non-combustible. Water Spray (Fog), Dry Chemical; CO2; or Foam may be used where product is stored.
Fire and Explosion Hazards: None
Special Firefighting Procedures: Do not enter confined fire-spaces without protective clothing and self-contained air supply.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill or Leak: Before attempting clean up, refer to personal protection information. Do not touch or walk through spilled material. Stop leak if you can without risk. Dike ahead of large spills to prevent run-off. Mop, pump or take up with sand or other inert absorbent and reclaim into containers for reuse, recycle or proper disposal.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures and Equipment: Avoid contact with corrosion sensitive metals, leather and wood. Do not get in eyes, on skin or clothing. Sprays and generated mists can be irritating. Use only according to dilution instructions and with adequate protective clothing.

Storage Requirements: Keep container closed when not in use. Wash thoroughly after handling. D.O.T. Classification: Not Regulated

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: Specific use conditions (spraying/confined spaces) where regulatory limits for KOH are exceeded, may require local exhaust ventilation to prevent release of mist &/or vapors into work environment. If ventilation is not adequate, use NIOSH/MSHA approved respirator with alkaline mist/gas cartridge & full face piece.

Eye Protection: Close fitting safety glasses/goggles/ face shield depending upon conditions of use.

Protective Clothing: Impervious protective clothing appropriate to minimize contact (ie: rubber boots, apron, faceshield) especially where sprayback/misting conditions exist. Rubber protective gloves.

Exposure Guidelines: KOH TLV = 2mg/M3. Eye wash station and safety shower in handling area.

Specific Engineering Controls (such as ventilation, enclosed process): Insure adequate ventilation to control KOH airborne concentration below TLV of 2Mg/M3. Eye wash station and safety shower in handling area.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid	Freezing Point: 0°C/32°F	% Volatile by Weight: ~81%
Color: Opal	Vapor Density [air =1]: Not Determined	Evaporation Rate: (vs. H2O):About the same.
Odor: Mild, Pleasant Odor	Vapor Pressure: Not Determined	Specific Gravity: (H2O=1): 1.13 (+/-0.005)
Boiling Point: 100°C/212°F	Solubility in Water: Complete	pH (concentrate): 13.2 (=/-0.5)

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable

Hazardous Polymerization: None

Incompatibilities: Strong acids/oxidizers. Do not mix with chlorinated detergents (bleach).

Reactive Conditions to avoid: Do not mix with chlorinated detergents (bleach) or any other chemicals.

Decomposition Products: Burning may produce oxides of carbon and other substances.

SECTION 11 – TOXICOLOGICAL INFORMATION

Hazardous Ingredients	CAS #	EINECS #	LD 50 of Ingredient (Specify Species)	LC50 of Ingredient (Specify Species)
Potassium Hydroxide	1310-58-3		365 mg/kg (Oral; Rat)	Not Determined
Nonionic Surfactant	Proprietary		>5.0 g / kg (Oral ; Rat)	Not Determined
Sodium Metasilicate	6834-92-0		1280 mg/kg (Oral; Rat)	Not Determined
Sodium Tripolyphosphate	7758-29-4	231-838-7	3120 mg/kg (oral; Rat)	Not Determined

SECTION 12 – ECOLOGICAL INFORMATION

Hazardous Ingredients	Aquatic Toxicity Data
Potassium Hydroxide	LC50 (96 hr) = 179mg/l (Fathead Minnow)
Nonionic Surfactant	Not Determined
Sodium Metasilicate	LC50 (96 hr) = 247 mg/l (Daphnia Magna)
Sodium Tripolyphosphate	EC50 (48 hr) = >1,000 mg/l (Daphnia Magna)

SECTION 13 – DISPOSAL CONSIDERATIONS**Waste Disposal:** Dispose of in an approved waste facility according to Federal, State and local 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>
DOT (Land)	Not Regulated			
IMO (Water)	No Data.			
ICAO (Air)	No Data.			

SECTION 15 – REGULATORY INFORMATION

WHMIS Classification: (Workplace Hazardous Material Information System)	Class E - Corrosive Material
SARA Title III: (Superfund Amendments & Reauthorization Act)	Contains no Section 313 listed substances subject to reporting requirement.
OSHA: (Occupational Safety & Health Administration)	OSHA Hazardous - Acute hazard
TSCA: (Toxic Substance Control Act)	All ingredients are TSCA registered.
VOC: (volatile Organic Compounds)	Less than 1%
CPR: (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
EINECS: (European Inventory of Existing Commercial Chemical Substances)	No Data.
DSL / NDSL: (Canadian Domestic Substance List)(Non-Domestic Substance List)	All ingredients are listed on the Canadian DSL.
CERCLA: (Comprehensive Response Compensation & Liability Act)	RQ = >10,000 lbs (KOH)
IDL: (Canadian Ingredient Disclosure List)	Sodium metasilicate and potassium hydroxide are listed.
NFPA (HMIS) Rating: (Hazardous Materials Identification System)	Health = 2 Flammability = 0 Reactivity = I

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.