



Chemical Name: Calclean

Manufacturer: Special HD

Container size: 1 gallon

Location: VLA

Disposal: Place empty container in trash.



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name Calclean Special HD (4143)
CAS # Mixture
Product use Heavy Duty Cleaner/Degreaser
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

Emergency overview WARNING
EYE AND SKIN IRRITANT.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Eyes May cause severe irritation or chemical burns.

Skin This product is non-corrosive based on test data.
May cause irritation.

Inhalation Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).

Ingestion May cause stomach distress, nausea or vomiting.

Target organs Eyes. Respiratory system. Skin.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

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

Potential environmental effects Components of this product have been identified as having potential environmental concerns.

3. Composition / Information on Ingredients

| Ingredient(s) | CAS # | Percent |
|--|------------|---------|
| Sodium metasilicate | 6834-92-0 | 3 - 7 |
| Sodium tripolyphosphate | 7758-29-4 | 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 |

4. First Aid Measures

First aid procedures

Eye contact Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.

Skin contact Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

Inhalation If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion Do not induce vomiting. 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.

Notes to physician Symptoms may be delayed.

General advice

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

| | |
|---|---|
| Flammable properties | Not flammable by WHMIS/OSHA criteria. |
| Extinguishing media | |
| Suitable extinguishing media | Dry chemical. Carbon dioxide. Water spray. Alcohol foam. |
| Unsuitable extinguishing media | Not available |
| Protection of firefighters | |
| Specific hazards arising from the chemical | Not available |
| Protective equipment for firefighters | Firefighters should wear full protective clothing including self contained breathing apparatus. |
| Hazardous combustion products | May include and are not limited to: Oxides of sulphur. 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 | Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. |
| Environmental precautions | Do not discharge into lakes, streams, ponds or public waters. |
| Methods for containment | Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas. |
| Methods for cleaning up | Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills to original containers for re-use. |

7. Handling and Storage

| | |
|-----------------|---|
| Handling | WARNING EYE AND SKIN IRRITANT. 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. |
| Storage | Keep out of reach of children. Store in a closed container away from incompatible materials. |

8. Exposure Controls / Personal Protection

Exposure limits

| Ingredient(s) | Exposure Limits |
|--|--|
| Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy- | ACGIH-TLV Not established OSHA-PEL Not established |
| Potassium hydroxide | ACGIH-TLV Ceiling: 2 mg/m3 OSHA-PEL Not established |
| Sodium lauriminodipropionate | ACGIH-TLV Not established OSHA-PEL Not established |
| Sodium metasilicate | ACGIH-TLV TWA: 10 mg/m3 OSHA-PEL Not established |
| Sodium tripolyphosphate | ACGIH-TLV Not established OSHA-PEL Not established |

Engineering controls

General ventilation normally adequate.

Personal protective equipment

Eye / face protection

Wear safety glasses with side shields.

Hand protection

Rubber gloves. Confirm with a reputable supplier first.

Skin and body protection

As required by employer code.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Avoid breathing mists or vapors.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

| | |
|--|--------------------|
| Appearance | Liquid. |
| Color | Opal Green |
| Form | Liquid |
| Odor | Fresh. |
| Odor threshold | Not available |
| Physical state | Liquid |
| pH | 13.5 |
| Melting point | Not available |
| Freezing point | 32.00 °F (0 °C) |
| Boiling point | 212.00 °F (100 °C) |
| Pour point | Not available |
| Evaporation rate | Same as water |
| Flash point | None to boiling |
| Auto-ignition temperature | Not available |
| Flammability limits in air, lower, % by volume | Not available |

| | |
|---|---------------|
| Flammability limits in air, upper, % by volume | Not available |
| Vapor pressure | Not available |
| Vapor density | Not available |
| Specific gravity | 1.13 ± 0.005 |
| Octanol/water coefficient | Not available |
| Solubility (H2O) | Complete |
| VOC (Weight %) | Not available |
| Viscosity | Not available |
| Percent volatile | 81 |

10. Stability and Reactivity

| | |
|---|---|
| Reactivity | Reacts violently with acids. 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 | Do not mix with other chemicals. Hazardous vapours may be produced when mixed with chlorinated detergents or sanitizers. |
| Incompatible materials | Acids. Oxidizing agents. |
| Hazardous decomposition products | May include and are not limited to: Oxides of sulphur. Oxides of phosphorus. Oxides of carbon. |

11. Toxicological Information

Component analysis - LC50

| Ingredient(s) | LC50 |
|--|---------------|
| Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy- | Not available |
| Potassium hydroxide | Not available |
| Sodium lauriminodipropionate | Not available |
| Sodium metasilicate | Not available |
| Sodium tripolyphosphate | Not available |

Component analysis - Oral LD50

| Ingredient(s) | LD50 |
|--|-----------------|
| Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy- | 1700 mg/kg rat |
| Potassium hydroxide | 214 mg/kg rat |
| Sodium lauriminodipropionate | 31300 mg/kg rat |
| Sodium metasilicate | 1153 mg/kg rat |
| Sodium tripolyphosphate | 3100 mg/kg rat |

Effects of acute exposure

| | |
|---|---|
| Eye | May cause severe irritation or chemical burns. |
| Skin | This product is non-corrosive based on test data. May cause irritation. |
| Inhalation | Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness). |
| Ingestion | May cause stomach distress, nausea or vomiting. |
| Sensitization | Non-hazardous by WHMIS/OSHA criteria. |
| Chronic effects | Non-hazardous by WHMIS/OSHA criteria. |
| Carcinogenicity | Non-hazardous by WHMIS/OSHA criteria. |
| Mutagenicity | Non-hazardous by WHMIS/OSHA criteria. |
| Reproductive effects | Non-hazardous by WHMIS/OSHA criteria. |
| Teratogenicity | Non-hazardous by WHMIS/OSHA criteria. |
| Name of Toxicologically Synergistic Products | Not available |

12. Ecological Information

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

Ecotoxicity - Freshwater Fish - Acute Toxicity Data

| | | |
|-------------------------|-----------|--|
| Potassium hydroxide | 1310-58-3 | 96 Hr LC50 Gambusia affinis: 80 mg/L [static] |
| Sodium metasilicate | 6834-92-0 | 96 Hr LC50 Brachydanio rerio: 210 mg/L [semi-static]; 96 Hr LC50 Brachydanio rerio: 210 mg/L |
| Sodium tripolyphosphate | 7758-29-4 | 48 Hr LC50 Leuciscus idus: 1650 mg/L |

Ecotoxicity - Water Flea - Acute Toxicity Data

| | | |
|---------------------|-----------|------------------------------------|
| Sodium metasilicate | 6834-92-0 | 96 Hr EC50 Daphnia magna: 216 mg/L |
|---------------------|-----------|------------------------------------|

| | |
|--|---------------|
| Persistence / degradability | Not available |
| Bioaccumulation / accumulation | Not available |
| Mobility in environmental media | Not available |
| Environmental effects | Not available |
| Aquatic toxicity | Not available |
| Partition coefficient | Not available |
| Chemical fate information | Not available |
| Other adverse effects | Not available |

13. Disposal Considerations

| | |
|--|--|
| Disposal instructions | Dispose in accordance with all applicable regulations. |
| Waste from residues / unused products | Not available |
| Contaminated packaging | Not available |

14. Transport Information

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

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

Canada - WHMIS - Ingredient Disclosure List

| | | |
|---------------------|-----------|-----|
| Potassium hydroxide | 1310-58-3 | 1 % |
| Sodium metasilicate | 6834-92-0 | 1 % |

WHMIS status Controlled

WHMIS classification Class D - Division 2B

WHMIS labeling



Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

US Federal regulations

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

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

| | | |
|-------------------------|-----------|--|
| Potassium hydroxide | 1310-58-3 | 1000 Lb final RQ; 454 kg final RQ |
| Sodium tripolyphosphate | 7758-29-4 | 5000 Lb final RQ (listed under Sodium phosphate, tribasic); 2270 kg final RQ (listed under Sodium phosphate, tribasic) |

U.S. - CWA (Clean Water Act) - Hazardous Substances

| | | |
|-------------------------|-----------|---------|
| Potassium hydroxide | 1310-58-3 | Present |
| Sodium tripolyphosphate | 7758-29-4 | Present |

CERCLA (Superfund) reportable quantity

Potassium hydroxide: 1000.0000
 Sodium tripolyphosphate: 5000.0000

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

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Hazardous substance

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

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Potassium hydroxide 1310-58-3 Present
 Sodium tripolyphosphate 7758-29-4 Present (listed under Sodium phosphate, tribasic)

U.S. - Louisiana - Reportable Quantity List for Pollutants

Potassium hydroxide 1310-58-3 1000 Lb final RQ; 454 kg final RQ
 Sodium tripolyphosphate 7758-29-4 5000 Lb final RQ (listed under Sodium phosphate, tribasic); 2270 kg final RQ (listed under Sodium phosphate, tribasic)

U.S. - Massachusetts - Right To Know List

Potassium hydroxide 1310-58-3 Present
 Sodium tripolyphosphate 7758-29-4 Present

U.S. - Minnesota - Hazardous Substance List

Potassium hydroxide 1310-58-3 Present

U.S. - New Jersey - Right to Know Hazardous Substance List

Potassium hydroxide 1310-58-3 sn 1571

U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

Potassium hydroxide 1310-58-3 1000 Lb RQ (air); 100 lb RQ (land/water)
 Sodium tripolyphosphate 7758-29-4 5000 Lb RQ (air); 100 lb RQ (land/water)

U.S. - Pennsylvania - RTK (Right to Know) List

Potassium hydroxide 1310-58-3 Environmental hazard
 Sodium tripolyphosphate 7758-29-4 Environmental hazard

U.S. - Rhode Island - Hazardous Substance List

Potassium hydroxide 1310-58-3 Toxic (caustic); Flammable (caustic)

Inventory name

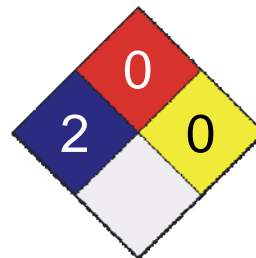
| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | 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 HMIS/NFPA | |
|---------------------|---|
| Severe | 4 |
| Serious | 3 |
| Moderate | 2 |
| Slight | 1 |
| Minimal | 0 |

| | |
|---------------------|-----|
| Health | / 2 |
| Flammability | 0 |
| Physical Hazard | 0 |
| Personal Protection | X |



Disclaimer

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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Prepared by Nu-Calgon Technical Service (314) 469-7000
Other information For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.