



# SAFETY DATA SHEET

Issue Date 4/15/2014

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Version 1

## 1. IDENTIFICATION

### Product identifier

Product Name: KLEEN SCALE

### Other means of identification

Product code: FS-892

Synonyms: None

### Recommended use of the chemical and restrictions on use

Recommended Use: Descaler.

Uses advised against: Consumer use

### Details of the supplier of the safety data sheet

#### Supplier Address

FRONTIER PERFORMANCE LUBRICANTS INC

PO BOX 1777

LODI, CA 95241

Phone: (800)-807-4496

Fax: (209)-334-6408

### Emergency telephone number

Emergency Telephone: PERS (800)-633-8253

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                                   |            |
|-----------------------------------|------------|
| Skin corrosion/irritation         | Category 2 |
| Serious eye damage/eye irritation | Category 1 |
| Corrosive to metals               | Category 1 |

### Label elements

#### EMERGENCY OVERVIEW

#### Signal word

Danger

#### Hazard statements

Causes skin irritation

Causes serious eye damage

May be corrosive to metals



**Appearance** Aqueous solution

**Physical state** Liquid

**Odor** Pleasant

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Keep only in original container

**Eyes** 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/physician

**Skin** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

If skin irritation occurs: Get medical advice/attention

Wash contaminated clothing before reuse

**Inhalation** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

**Ingestion** IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Absorb spillage to prevent material damage

**Precautionary Statements - Storage**

Store locked up

Store in corrosive resistant plastic, or steel container with a resistant inner liner

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

**Other information**

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

| Components                          | CAS-No     | Weight % | Trade Secret |
|-------------------------------------|------------|----------|--------------|
| Hydrochloric acid                   | 7647-01-0  | 8-10     | *            |
| Dipropylene glycol monomethyl ether | 34590-94-8 | 1-6      | *            |

**4. FIRST AID MEASURES**

**First aid measures**

- Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.
- Skin contact:** Wash off immediately with plenty of water. Consult a physician if necessary. Remove and wash contaminated clothing before re-use.
- Inhalation:** Move to fresh air in case of accidental inhalation of vapours. If symptoms persist, call a physician.
- Ingestion:** Call a physician or Poison Control Centre immediately. Do not induce vomiting. Drink plenty of water.

**Most important symptoms and effects, both acute and delayed**

Symptoms: No information available.

**Indication of any immediate medical attention and special treatment needed****5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

The product is not flammable.

Unsuitable extinguishing media None

**Specific hazards arising from the chemical**

Contact with metals may evolve flammable hydrogen gas. Water may be used to cool closed containers.

**Explosion data**

Sensitivity to Mechanical Impact: None.

Sensitivity to Static Discharge: None.

**Special protective equipment for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Personal precautions: Use personal protective equipment.

**Environmental precautions**

Environmental precautions: Should not be released into the environment.

**Methods and material for containment and cleaning up**

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Neutralize with Soda Ash or Lime. Dilute with plenty of water.

**7. HANDLING AND STORAGE****Precautions for safe handling**

Handling: Use only in well-ventilated areas. Avoid contact with eyes and skin.

**Conditions for safe storage, including any incompatibilities**

Storage Conditions: Keep in properly labelled containers. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using

Packaging materials: Store in fiberglass, polyethylene, or polypropylene containers. Do not store in metal containers, especially aluminum.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

| Components                                       | ACGIH TLV | OSHA (TWA mg/m <sup>3</sup> ): | IDLH:   |
|--|-----------|--------------------------------|---------|
| Hydrochloric acid - 7647-01-0                    | 2 ppm     | 5 ppm                          | 50 ppm  |
| Dipropylene glycol monomethyl ether - 34590-94-8 | 100 ppm   | 100 ppm                        | 600 ppm |

**Appropriate engineering controls**

**Engineering measures to reduce exposure:** Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment**

**Respiratory protection:** Do not inhale aerosol. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.  
**Hand protection:** Nitrile rubber  
**Eye protection:** Safety glasses with side-shields  
**Skin and body protection:** Long sleeved clothing  
**General Hygiene Considerations:** Avoid contact with skin, eyes and clothing

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

**Physical state:** Liquid  
**Appearance:** Aqueous solution **Odor:** Pleasant **Color:** Light yellow **Odor threshold:** No information available

| <u>Property</u>                     | <u>Values</u>            | <u>Remarks • Method</u>  |                                      |                          |
|-------------------------------------|--------------------------|--------------------------|--------------------------------------|--------------------------|
| <b>Melting point/freezing point</b> | No information available |                          | <b>pH</b>                            | < 1.0                    |
| <b>Flash point</b>                  | No information available | Cleveland Open Cup       | <b>Boiling point / boiling range</b> | 101 °C / 214 °F          |
| <b>Flammability (solid, gas)</b>    | No information available |                          | <b>Evaporation rate</b>              | No information available |
| <b>Upper flammability limit:</b>    | No information available |                          | <b>Flammability Limit in Air</b>     |                          |
| <b>Vapor pressure</b>               | 30 mmHg (est.)           |                          | <b>Lower flammability limit:</b>     | No information available |
| <b>Specific Gravity</b>             | > 1.0                    |                          | <b>Vapor density</b>                 | No information available |
| <b>Solubility in other solvents</b> | No information available |                          | <b>Water solubility</b>              | Soluble in water         |
| <b>Autoignition temperature</b>     | No information available |                          | <b>Partition coefficient</b>         | No information available |
| <b>Kinematic viscosity</b>          | No information available |                          | <b>Decomposition temperature</b>     | No information available |
| <b>Explosive properties</b>         |                          | No information available | <b>Dynamic viscosity</b>             | No information available |
| <b>Oxidizing properties</b>         |                          | No information available |                                      |                          |

**Other information**

**Softening point** No information available  
**Molecular weight** No information available  
**VOC Content (%)** No information available  
**Density** No information available  
**Bulk density** No information available

## 10. STABILITY AND REACTIVITY

**Reactivity**  
 Not applicable

**Chemical stability**

**Stability:** Stable under recommended storage conditions.  
**Possibility of Hazardous Reactions**

**Possibility of Hazardous Reactions:** Contact with metals may evolve flammable hydrogen gas.  
**Hazardous polymerization:** Hazardous polymerization does not occur.

**Conditions to avoid**

**Conditions to avoid:** Stable under recommended storage conditions.

**Hazardous Decomposition Products**

**Hazardous Decomposition Products:** Chlorine and hydrogen gas may be released at high temperatures.

**Incompatible materials**

**Incompatible materials:** Strong bases. Strong oxidizing agents

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information:** Product does not present an acute toxicity hazard based on known or supplied information

**Eye contact:** Avoid contact with eyes.

**Skin contact:** Irritating to skin.

**Inhalation:** Avoid breathing vapors or mists. Vapors may be irritating to eyes, nose, throat, and lungs.

**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

| Components                                       | Oral LD50            | Dermal LD50             | Inhalation LC50        |
|--|----------------------|-------------------------|------------------------|
| Hydrochloric acid - 7647-01-0                    | = 700 mg/kg ( Rat )  | > 5010 mg/kg ( Rabbit ) | = 3124 ppm ( Rat ) 1 h |
| Dipropylene glycol monomethyl ether - 34590-94-8 | = 5230 mg/kg ( Rat ) | = 9500 mg/kg ( Rabbit ) | -                      |

**Information on toxicological effects****Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No sensitization responses were observed.  
**Mutagenic effects:** Did not show mutagenic or teratogenic effects in animal experiments.  
**Carcinogenicity:** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.  
**Reproductive toxicity:** This product does not contain any known or suspected reproductive hazards.  
**STOT - Single Exposure:** None under normal use conditions.  
**STOT - Repeated Exposure:** None under normal use conditions.  
**Aspiration hazard:** Not applicable.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral):** 6813 mg/kg  
**ATEmix (dermal):** 41651 mg/kg  
**ATEmix (inhalation-dust/mist):** 5.2 mg/l

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

No known hazards to the aquatic environment.

9.9% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Dipropylene glycol monomethyl ether - 34590-94-8 |  |
|--|--|
| <b>Algae/aquatic plants</b>                      | -  |
| <b>Fish</b>                                      | 10000: 96 h Pimephales promelas mg/L LC50 static |
| <b>Crustacea</b>                                 | 1919: 48 h Daphnia magna mg/L LC50               |

**Persistence and degradability**

Readily biodegradable, according to appropriate OECD test. (based on components).

**Bioaccumulation**

No information available.

**Mobility**

Soluble in water.

| Components                                       | Partition coefficient |
|--|-----------------------|
| Dipropylene glycol monomethyl ether - 34590-94-8 | -0.064                |

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes:** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging:** Do not reuse container.

### 14. TRANSPORT INFORMATION

**Note:** This material is corrosive to Aluminum only. Non-Corrosive to Skin & Mild Steel

**DOT** Not Regulated by ground transportation only per exception in 49 CFR §173.154(d)(1).

**TDG**

**UN-No:** UN3264  
**Proper shipping name:** Corrosive Liquid, Acidic, Inorganic, n.o.s. (Contains Hydrochloric Acid)  
**Hazard Class:** 8  
**Packing group:** PGIII

**IATA-DGR**

**UN-No:** UN3264  
**Proper shipping name:** Corrosive Liquid, Acidic, Inorganic, n.o.s. (Contains Hydrochloric Acid)  
**Hazard Class:** 8  
**Packing group:** PGIII

**IMO / IMDG**

**UN/ID No.** UN3264  
**Proper shipping name** Corrosive Liquid, Acidic, Inorganic, n.o.s. (Contains Hydrochloric Acid)  
**Hazard Class** 8  
**Packing group** PGIII

### 15. REGULATORY INFORMATION

**International Inventories**

**TSCA:** Listed in TSCA  
**DSL:** Not listed in DSL  
**EINECS/ELINCS:** This product does not comply with EINECS/ELINCS  
**CHINA:** This product does not comply with China IECSC.  
**KECL:** This product does not comply with Korea KECL.  
**PICCS:** This product does not comply with Philippines PICCS.

**AICS:** This product does not comply with Australia AICS

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Components        | SARA 313 Threshold:          |
|-------------------|------------------------------|
| Hydrochloric acid | Hydrochloric acid (8 - 12%). |

**SARA 311/312 Hazard Categories**

|  |     |
|--|-----|
| <b>Acute Health Hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | No  |
| <b>Fire Hazard</b>                       | No  |
| <b>Sudden release of pressure hazard</b> | No  |
| <b>Reactive Hazard</b>                   | No  |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**State Regulations (RTK)**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

| Components                                       | NJRTK:                     | MARTK:  | PARTK:  |
|--|----------------------------|---------|---------|
| Hydrochloric acid - 7647-01-0                    | Substance no. 1012 Listed. | Listed. | Listed. |
| Dipropylene glycol monomethyl ether - 34590-94-8 | Substance no. 0804 Listed. | Listed. | Listed. |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. OTHER INFORMATION**

**Nfpa**

**Health:** 2

**Flammability:** 0

**Instability:** 0

**NFPA/HMIS \* for Carc, Muta, Tera, Specific Organ \***

**HMIS health rating**

**Health:** 2

**Flammability:** 0

**Physical hazards:** 0

**Personal protection:** B

**Issue Date**

4/15/2015

Revision Date 4/15/2015

Revision Note

Not applicable

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**