



SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Heating Coil **Descaler**

Distributed by:

High PSI LTD
75 N. Brandon Drive
Glendale Heights, IL 60139

For More Information Call High PSI:

800.666.3900

24/7 Transportation Emergencies

Call INFOTRAC: 800-535-5053
Account No.: 77840

2. HAZARD IDENTIFICATION

IF CONTACT WITH SKIN (or hair): Remove all contaminated clothing immediately and rinse skin with water/shower for at least 20 minutes.

GHS Ratings:

Oral Toxicity	Acute Tox. 4	Oral>300+<=2000mg/kg
Inhalation Toxicity	Acute Tox. 3	Gases>500+<=2500ppm, Vapors>2+<=10mg/l, Dusts & mists>0.5+<=1mg/l
Skin corrosive	1A	Destruction of dermal tissue: Exposure < 3 min. Observation <1 hour, visible necrosis in at least one animal
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days After exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Respiratory sensitizer	1	Respiratory sensitizer

GHS Hazards

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H331	Toxic if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled

GHS Precautions

P260	Do not breathe dust/fume/gas/mist/vapors/spray
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P264	Wash ... thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/protective clothing/eye protection/face protection
P285	In case of inadequate ventilation wear respiratory protection
P310	Immediately call a POISON CENTER or doctor/physician
P321	Specific treatment (see ... on this label)
P363	Wash contaminated clothing before reuse
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P405	Store locked up
P403+P233	Store in a well ventilated place. Keep container tightly closed

Signal Word: Danger



3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS number	Weight Concentration %
Water	7732-18-5	60.00% - 70.00%
Hydrochloric Acid	7647-01-0	30.00% - 40.00%

4. FIRST-AID MEASURES

INHALATION: Move exposed party to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

EYE CONTACT: In case of eye contact, rinse with plenty of water for at least 20 minutes and seek medical attention immediately.

SKIN CONTACT: Immediately flush with plenty of water for at least 20 minutes while removing contaminated clothing. Get medical attention immediately.

INGESTION: Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Flash Point: None

LEL:

UEL:

FLAMMABLE LIMITS: Product is not flammable. However, contact with metal may release flammable hydrogen gas

EXTINGUISHING MEDIA: Use an extinguishing agent suitable for the fire and other materials present that are exposed to fire.

FIRE AND EXPLOSION HAZARD: Use water spray to cool unopened containers if necessary to prevent BLEVE (Boiling Liquid Expanding Vapor Explosion).

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions toxic fumes should be anticipated.

FIRE FIGHTING: See also Stability and Reactivity section.

FIRE EQUIPMENT: Wear self-contained, approved breathing apparatus and full protective clothing (including eye protection and boots).

6. ACCIDENTAL RELEASE MEASURES

SPILL/LEAK: Follow your companies established procedures for reporting and/or responding to chemical incidents. No action shall be taken involving any personal risk without suitable training and use of appropriate personal protective equipment.

See section 8 for recommendations on the use of personal protective equipment.

SMALL SPILL: Stop leak if it can be done without risk. Be sure to utilize appropriate personal protective equipment. Clean up spilled material with noncombustible absorbent material, then place in a suitable container for disposal in accordance with Federal, state, and local requirements. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with Federal, state, and local regulations.

LARGE SPILL: No action shall be taken involving any personal risk or without suitable training, and use of appropriate personal protective equipment. Stop leak if it can be done without risk. Prevent spillage from entering drains and/or waterways. Any release to the environment may be subject to Federal, state, and local reporting requirements.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored, or processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. Use with adequate ventilation. Avoid formation of aerosol mixtures involving the product.

See section 8 for recommendations on the use of appropriate personal protective equipment.

STORAGE: Keep container closed when not in use. Store in cool, dry well ventilated area. Keep away

from incompatible materials (see section 10 for incompatibilities). Protect from excessive heat and/or freezing.

REGULATORY: Do not store in unlabeled containers. Adhere to precautionary warnings on the label.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Chemical Name / CAS No.</u>	<u>OSHA Exp Limit</u>	<u>ACGIH Exp Limit</u>	<u>Other Exp Limit</u>
Water 7732-18-5	Not Established	Not Established	Not Established
Hydrochloric Acid 7647-01-0	Not Established	2 ppm Ceiling	NIOSH: 5 ppm Ceiling; 7mg/m ³ Ceiling

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

VENTILATION: Use only with adequate ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions present. 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.

ADMINISTRATIVE CONTROLS: No action shall be taken involving any personal risk or without suitable training and issuance of appropriate personal protective equipment.

PROTECTIVE GEAR:

Eye protection: Wear safety goggles if eye contact with material is possible (face shield recommended if splashing is possible).

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is appropriate. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other Skin Protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection: If needed, use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

CONTAMINATED GEAR: Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot, or as a specification for the product.

Specific Gravity (SG):	1.17 (approximate)
Appearance:	Clear Colorless, Liquid
Odor:	Acrid odor
pH:	<1 (1% solution)

10. STABILITY AND REACTIVITY

Product is normally STABLE under normal conditions of storage and handling.

INCOMPATIBLE MATERIALS: Highly corrosive to most metals. Hydroxides, amine, alkalis, copper, brass, zinc.

HAZARDOUS DECOMPOSITION: Will release chlorine.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Mixture Toxicity

Oral Toxicity LD50: 643mg/kg

Inhalation Toxicity LC50: 5mg/L

Component Toxicity

7647-01-0 Hydrochloric Acid

Oral LD50: 238 - (Rat) Inhalation LC50: 2 mg/L (Rat)

This material has been defined as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

TARGET ORGANS: Eyes, Skin, Respiratory System

Effects of Overexposure

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
None			No Data Available

ACUTE TOXICITY: Corrosive to eyes and skin, resulting in very severe burns.

CHRONIC EFFECTS: Not Known

12. ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials (if any).

Component Ecotoxicity

13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it may meet the criteria of a hazardous waste as defined in 40 CFR 261 as a minimum of a D002 material, defined as a Waste Corrosive material [$\text{pH} \leq 2$ or ≥ 12.5 , or corrosive to steel]. Other waste codes may apply. Waste material should only be sent to an appropriately permitted RCRA facility.

Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Dispose of in accordance with Federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

Important Note: The data provided in this section is for information purposes only. Please consult the appropriate regulations to properly classify your shipment for transportation, as shipping descriptions may vary based upon mode of transport, quantities, package size, and/or origin/destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

For small quantities packed in combination packaging, exceptions may apply.

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
PHMSA	Hydrochloric Acid	UN1789	PG II	8

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

The following chemicals are reportable under Pennsylvania Right to Know:

7647-01-0 Hydrochloric Acid

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

- None

SARA313

- None

<u>Country Listed</u>	<u>Regulation</u>	<u>All Components</u>
U.S.A.	TSCA	Yes

United States inventory (TSCA 8b): All components are listed or exempted.

- None

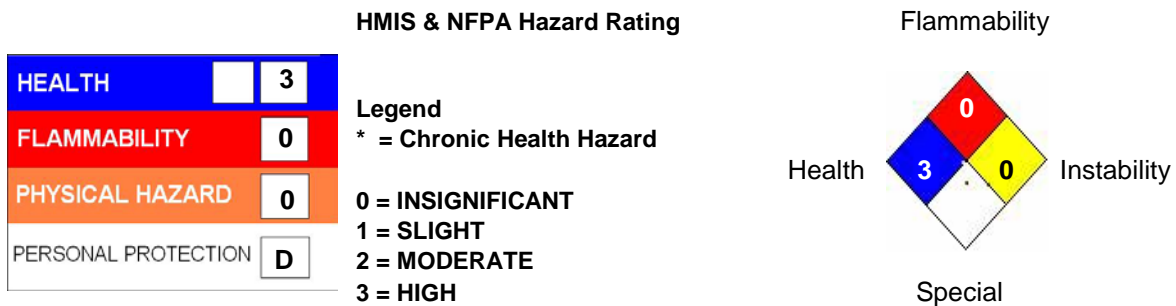
SARA 313 Components: The following listed components (if any) are subject to the Supplier Notification Requirement found in 40 CFR 372.45 (c 4); a part of Title III of the Superfund Amendments and Reauthorization Act of 1986.

7647-01-0 Hydrochloric Acid 30 - 40%

16. OTHER INFORMATION

Hazardous Material Information System (HMIS) (NFPA)

National Fire Protection Association



Disclaimer: It is believed the information herein provided is factual and accurate, but is not intended to be all inclusive. The information relates only to the specific material denoted and does not relate to its use in combination with other materials, or its use as to any particular process. Because safety standards and regulations are subject to change and because there is no ongoing control over the material when being handled, stored or used, the end user should satisfy themselves that they have current information regarding the particular way the material is handled, stored or used and that use and disposition of the material is done in accordance with Federal, state and local law. NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN, OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE.

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