



COSHH DATA SHEET

Pro-Shine

Total Pages: 4

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COSHH Safety Data Sheet #: Pro-Shine
 Catalogue #: PRO-SHINE

SECTION 1. PRODUCT NAME

Pro-Shine Acid Coil Cleaner

SECTION 2. HAZARDOUS INGREDIENTS INFORMATION

INGREDIENT	CAS NO	OSHA PEL	ACIGH TLV	OTHER STEL	% OR RANGE
Water	7732-18-5				60-90
Phosphoric acid	7664-38-2	1 mg/m3	1 mg/m3	3 mg/m3	<5
Hydrofluoric acid	7664-39-3	3 mg(F)/m3	3 mg(F)/m3	6 mg(F)/m3	<15

SECTION 3. HAZARDS IDENTIFICATION

Route of entry: Inhalation: **yes** Skin: **yes** Eyes: **yes** Ingestion: **yes**

Health Hazards (acute and chronic): This material is corrosive to skin, eyes, and internal organs.

Signs and Symptoms of Exposure:

Eye Contact: Severe irritation and possible burns.

Skin Contact: Severe irritation and possible chemical burns. Symptoms may be delayed for up to 24 hours.

Inhalation: Mists may irritate respiratory system and cause difficulty breathing.

Ingestion: Solutions and mists are extremely corrosive and toxic. May cause gastric distress, diarrhea, and vomiting. May be fatal if swallowed.

Medical conditions generally aggravated by exposure: Contact may aggravate pre-existing medical conditions such as dermatitis or asthma.

Carcinogenicity: NTP? No. IARC? No. OSHA? No.

SECTION 4. FIRST AID

Emergency and First Aid Measures:

Eye Contact: Contact a physician and start treatment immediately!

1. Immediately flush the eyes with large amounts of gently flowing water for 15 minutes. Hold the eyelids open and away from the eyes during irrigation. Do not put any treatment into eyes unless directed by a physician.

2. Take the victim to a doctor, preferably an eye specialist, as soon as possible after the 15-minute rinse. Ice water compresses should be applied to the eyes while transporting the victim.

3. If a physician is not immediately available, irrigate the eyes with 500-1000 ml irrigation of 1% calcium gluconate aqueous ophthalmic solution followed by an additional 15-minute irrigation. Do not apply any other medication unless instructed to do so by a physician. AVOID RUBBING EYES.

Skin Contact: Contact a physician and start treatment immediately!

Note: For skin contact or suspected contact

Move victim immediately under a safety shower or other water source and flush the affected area with large amounts of tempered running water. Speed of washing off the acid is of primary importance. Remove all clothing and footwear while continuing to flush with flowing water. Continue washing for at least 15 minutes. Get the victim to a physician as quickly as possible after the 15-minute flushing.

Inhalation: Contact a physician and start treatment immediately!

1. Remove victim to fresh air. Make sure mouth and throat are clear of obstructions. If necessary, support breathing with artificial respiration.

2. Keep victim warm, quiet, and lying down.

3. Do not give stimulants unless directed by physician.

4. Do not allow the victim to become active for 24 hours. During this time, the victim should be examined by a physician and held under observation.

Ingestion: Contact a physician and start treatment immediately!

1. Have the victim drink 3-4 glasses of water as quickly as possible to dilute the product. Do not induce vomiting. Do not give emetics or baking soda. Never give anything by mouth to an unconscious person.

2. Give several glasses of milk or several ounces of milk of magnesia for their soothing effect. The calcium or magnesium in these compounds also acts as an antidote.

3. Get medical attention immediately.

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Notes To Physician: Treat as Hydrofluoric Acid Burn. Burns around fingernails or toenail are difficult to treat as the acid may penetrate the nails. Treatment may require removal of the nail. For minor burns to the face and mucous membranes, a salve containing 2.5% calcium gluconate may be used in lieu of HYAMINE or ZEPHIRAN solutions. The jelly may be massaged into the burn. A possible treatment is subcutaneous injection of sterile 2.5% calcium gluconate solution around and beneath the skin and in the burned areas. Initially use no more than 0.5cc per square centimetre of affected skin surface, and do not distort the appearance of the skin. If pain is not relieved, additional treatment may be indicated. Obtain additional information on treating hydrofluoric acid burns from a poison control centre.

Special notes to treating physician: Medical personnel treating any victim of hydrofluoric acid exposure should be aware of the following possible complications:

1. Shock
2. Inhalation of vapours can cause pulmonary edema for which effects may be delayed. In addition, vapours may burn oral tissue causing swelling which may restrict breathing.
3. Exposure to significant amounts of hydrofluoric acid by any route may also result in hypocalcemia. Hypocalcemia should be considered a risk in all instances of inhalation and ingestion, and whenever burns exceed 25 square inches (160 square centimetres of body surface).

SECTION 5. FIRE FIGHTING MEASURES

Not considered to be a fire hazard. Can react with certain metals, such as aluminium, to generate flammable hydrogen gas.

Explosion: May cause fire and explosions when in contact with incompatible materials.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire. Adding water to caustic solution generates large amounts of heat.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

SECTION 6. SPILL/ACCIDENTAL RELEASE MEASURES

Note: No cleanup should be attempted until cleanup personnel are equipped with personnel protective gear to prevent contact with product. (Applies to undiluted product.) Remove contaminated clothing immediately. Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Neutralize with sodium bicarbonate, soda ash, or lime. Pick up neutralized solution with a plastic pump or vacuum truck and store the neutralized solution in a leak-proof polyethylene container until product can be disposed of in a hazardous waste facility. Flush area twice with water to remove any remaining residues. Store wash solution in polyethylene containers for disposal. Do not use aluminium tools to collect absorbed material or aluminium containers to store collected wastes. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Centre is (800) 424-8802.

SECTION 7. HANDLING AND STORAGE

Keep containers closed when not in use. Practice good housekeeping. Wash hands after handling. Avoid smoking when using this product. Wash clothing that has become contaminated. Keep out of reach of children. Read the disposal information before disposing of leaking or empty containers. Avoid breathing mists or spray. Avoid contact with eyes. Use only with adequate ventilation. Do not use metal measuring containers for handling this product. Make sure all safety equipment is available and protective clothing is in use before handling this product. Do not store with aluminium or magnesium containers. Do not mix with acids or organic materials. Keep this and all chemicals out of the reach of children. Wash thoroughly after handling.

SECTION 8. EXPOSURE CONTROLS /PERSONAL PROTECTION

Airborne Exposure Limits:

- OSHA Permissible Exposure Limit (PEL): 15 mg/m³ Ceiling

- ACGIH Threshold Limit Value (TLV): 15 mg/m³ Ceiling

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personal Respirators (NIOSH Approved): If the exposure limit is exceeded and engineering controls are not feasible, a half face piece particulate respirator (NIOSH type N95 or better filters or European Standard EN 149 respirators) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerin, etc.) are present, use a NIOSH type R or P filter with acid-gas cartridge filter. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities or a source of running water in the work area. Work Hygienic Practices: Use proper industrial hygiene practices to minimize hazardous exposure. Wash hands after handling this material, and before eating or smoking.

SECTION 9. PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: >220°F

Vapour pressure (mm Hg): Same as water

Vapour Density (Air = 1): Same as water

Solubility in water: Water miscible pH@100%: 1-2

Appearance and odour: Pungent red liquid

Specific gravity (H₂O = 1): 1.08-1.09

Melting Point (Pour Point): <25°F

Evaporation Rate (Water = 1): >1

SECTION 10. STABILITY AND REACTIVITY DATA

Stability: Stable under ordinary conditions of use and storage.

Compatibility: (Materials to avoid): Do not mix this product with alkalis or any other material. Do not allow contact with glass.

Hazardous Decomposition or Byproducts: Hydrogen gas. Hydrogen fluoride, fluorine, fluorides, hydrogen sulfide, sulfur dioxide, phosgene gas.

Hazardous Polymerization: Will not occur

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Incompatibilities: Do not mix this product with alkalis or any other material. Do not allow contact with glass.

Conditions to Avoid: Heat, incompatibles.

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SECTION 11. TOXICOLOGY INFORMATION

RTECS#: CAS# 7664-39-3: MW7875000

LD50/LC50: CAS# 7664-39-3: Inhalation, mouse: LC50 = 342 ppm/1H; Inhalation, rat: LC50 = 1276 ppm/1H.

Carcinogenicity:

Hydrofluoric acid -

ACGIH: A4 - Not Classifiable as a Human Carcinogen (as F) (listed)

IARC: Group 3 carcinogen (listed as ** undefined **).

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: TCLo - Lowest published toxic concentration: Inhalation, Rodent - rat: 470 ug/m3/4H : female 1-22 day(s) after conception.

Neurotoxicity: No information available.

Mutagenicity: Cytogenetic analysis: Inhalation, Rodent - rat: 1 mg/m3/6H/24D (Intermittent).

Other Studies: See actual entry in RTECS for complete information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: Fish (fresh water) (for HF) 60 ppm lethal (time period not specified).

SECTION 13. DISPOSAL CONSIDERATIONS

Treat empty containers as hazardous. Dispose of spill-clean up and other wastes in accordance with Federal, State, and local regulations. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14. TRANSPORTATION INFORMATION

US DOT: Corrosive liquid, acidic, inorganic, n.o.s. (contains hydrofluoric acid, phosphoric acid), 8, UN3264, PGI International (Water, I.M.O.)

Proper Shipping Name: Corrosive liquid, basic inorganic, n.o.s. (contains hydrofluoric acid, phosphoric acid)

Hazard Class: 8

UN/NA: UN3264

Packing Group: II

SECTION 15. REGULATORY INFORMATION

EC Classification: 009-002-00-6 (Hydrofluoric acid)

Labelling –

-Risk phrases:

R35: Causes severe burns.

- Safety phrases

S2: Keep out of reach of children

S24/25: Avoid contact with skin and eyes

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39: Wear suitable, gloves and eye/face protection.

S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US EPA:

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Centre of release quantities of Hazardous Substances is not required for this material. Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on threshold planning quantities and release reporting based on reportable quantities in 40 CFR 355 (used for SARA 302, 304, 311, and 312) is not required for quantities below 250 pounds.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This material is not subject to reporting requirements.

Toxic Substances Control Act (TSCA) Status: The ingredients of this product are on the TSCA inventory.

State Right to Know

California Proposition 65:

Massachusetts: Hazardous substances and extraordinarily hazardous substances must be identified.

Pennsylvania: Hazardous substances must be identified.

California SCAQMD Rule 443.1 (VOC's)

Chemical Inventory Status

Ingredient	TSCA	EC	Japan	Australia	Korea	DSL	NDSL	Phil.
Hydrogen Fluoride (7664-39-3)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes

Federal, State & International Regulations

Ingredient	SARA 302 RQ TPQ	SARA 313	TSCA	RCRA
Mixture	No No	No 1000	No	No

SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: Yes (Mixture / Liquid)

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

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SECTION 16. OTHER INFORMATION

NFPA Ratings: Health: 3 Flammability: 0 Reactivity: 1

Label Hazard Warning: CORROSIVE POISON! Contains Hydrofluoric acid, phosphoric acid and sulfuric acid. May be fatal if swallowed. Harmful if inhaled. Causes burns to skin and eyes.

Label Precautions:

Do not use this product without skin and eye protection.

Do not use this product until you have read all warning statements on bottle and consulted the Safety Data Sheet

Do not use this product unless a source of running water is available.

Keep container closed.

Wash thoroughly after use.

Label First Aid: If swallowed, DO NOT INDUCE VOMITING. Immediately drink 3-4 glasses of water. Call a physician immediately. Eyes: flush eyes with running water for at least 15 minutes while lifting lids to rinse the area behind the eyelids. Skin: flush affected area with running water for at least 15 while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing does not return to normal within a few minutes, get medical attention.

Product Use: Air condition and refrigeration coil cleaner

SECTION 17. ADDITIONAL INFORMATION:

This information is provided in accordance with the requirements of the UK Health and Safety at Work Act 1974, and specifically in order to assist users of the product to make their 'assessment of health risks' as required by the UK Control of Substances Hazardous to Health Regulation 1988 (COSHH assessments). Provision of this information does not preclude users from seeking advice from other sources as indicated in the COSHH guides. This information is intended to cover potential hazards at the place of work and does not detail medical uses, indications, contra-indications and precautions for the treatment of patients.

SECTION 18. MANUFACTURER:

Specialty Chemical Manufacturing

A DiversiTech Company

1633-B High Bridge Road

Quincy, FL 32351

Phone: 0115 900 5858

EMERGENCY Phone No.: Chem-Tel Emergency Response: +1 813 248 0585

SECTION 19. REFERENCE NUMBER:

Date of Issue: 23/03/2006

COSHH Safety Data Sheet: PRO-SHINE

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