



Noble Earth Technologies

Stainless Steel Super Cleaner

MATERIAL SAFETY DATA SHEET

COMPANY DETAILS

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Hazardous according to the criteria of NOHSC Australia.

I IDENTIFICATION

Product Name: Stainless Steel Super Cleaner
Other Names: Proper Shipping Name is CORROSIVE LIQUID, TOXIC, N.O.S.
Product Code: None.
UN No: 2922
Hazchem Code: 2XE
Dangerous Goods Class: 8 Corrosive Substances.
Sub Risk Class: 6.1 Toxic Substances.
Packaging Group: II
Most EPGs may now be substituted by the Initial Emergency Response Guide, available from Standards Australia.
Poison Schedule: S7
Chemical Family: Water solution of ingredients (see below).
Uses: Cleaning stains from Stainless Steel and other surfaces.

Physical Appearance & Properties

Appearance & Odour: Clear liquid. Acidic odour.
Melting/softening point: Approximately -5°C.
Boiling point and vapour pressure: Approximately 100°C at 100kPa.
Volatile materials: Water component.
Flashpoint: Does not burn.
Specific gravity: No data.
Solubility in water: Completely soluble.
Corrosiveness: Very corrosive.

Ingredients: Chemical entity	CAS No	Proportion %	Worksafe Exposure Limits	
			TWA mg/m ³	STEL mg/m ³
Ammonium bifluoride *	1341-49-7	4	2.5	not set
Phosphoric acid *	7664-38-2	43	1	3
Other non hazardous ingredients	secret	10-30	not set	not set
Water	7732-18-5	to 100	not set	not set

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

* These ingredients together react to form hydrofluoric acid at approx 2.7% The TWA figure quoted is for Hydrogen Fluoride which is the toxic component in this preparation.

II HEALTH HAZARD DATA

Health Effects:

No specific data is available for the product for chronic exposure symptoms. The ingredients are not listed as carcinogenic in Worksafe's document "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" (May 1995), nor in NOHSC's "List of Designated Hazardous Substances" (April 1999).

Acute Effects:

Swallowed: Data suggests that this product is toxic if swallowed. Ingestion of small quantities may cause harm and larger quantities may lead to death.

Eye: This product is corrosive to the eyes. It will quickly cause intense discomfort such as severe pain, copious watering and redness of the eyes. Unless quickly treated, corrosive effects leading to permanent corneal damage, even blindness will occur.

Skin: Data suggests that this product is likely to be absorbed through the skin and be toxic by skin absorption. Major skin exposure may lead to serious health problems and even death if not treated promptly. This product is corrosive to skin. It will cause effects such as severe itchiness, blistering and skin reddening and death of skin tissues. Exposure may lead to permanent damage including scarring.

Inhalation: Data indicates that this product is very irritating if inhaled. Will cause pain and severe discomfort to throat and lungs. Likely also to cause severe coughing and lung congestion. Lungs may suffer irreversibly effects if exposure is prolonged or intense. It may take considerable time to recover from even minor exposure.

First Aid:

Obtain a supply of calcium gluconate gel and leave it in a nearby unlocked medicine cabinet.

Eyebaths or eyewash stations and safety deluge showers should be provided where this product is being used.

For advice, contact a Poisons Information Centre (phone 13 1126 from anywhere in Australia) or a doctor at once.

Swallowed: If swallowed, do NOT induce vomiting. Give a glass of water. Immediately contact a Doctor or Poisons Information Centre. Oral administration of calcium gluconate should be considered if product is ingested.

Eye: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained.

Skin: If on skin, immediately remove any contaminated clothing. Flush skin under running water for 15 minutes. Then apply calcium gluconate gel. Contact the Poisons Information Centre or a doctor.

Ensure contaminated clothing is thoroughly washed before using again.

Inhalation: If mists are inhaled, remove to fresh air. Lay victim down & keep warm and rested. If breathing is shallow, or has stopped, ensure clear airway and apply resuscitation or oxygen if available. Transport to hospital or doctor immediately.

Advice to Doctor: Hydrofluoric acid contact has a very specific treatment. Contact can be fatal, but treatment with calcium gluconate is a good, efficient treatment.

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III PRECAUTIONS FOR USE

Risk Phrases are: R34, R37, R41, R39/24/25. Causes burns. Irritating to respiratory system. Risk of serious damage to eyes. Toxic: danger of very serious irreversible effects in contact with skin and if swallowed.

Exposure Standards:

A time weighted average (TWA) has been established for Ammonium bifluoride, present in significant quantities in this product. This value is 2.5mg/m³. The corresponding STEL level is "not set". The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. See ingredients section on page 1 of this data sheet.

Engineering Controls:

In industrial situations, concentration values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify the process or environment to reduce the problem.

Personal Protection:

Obtain an emergency supply of calcium gluconate gel and place it near to the work area in an unlocked and well marked container. Only persons who have read this MSDS and who know the whereabouts of the calcium gluconate gel should be allowed to use the product.

Respiratory Protection: If there is a chance of vapours or mists accumulating in the area where this product is being used, a mask or respirator must be used. For help in selecting suitable equipment, consult AS/NZS 1715.

Protective Gloves: Impermeable protective gloves must be worn when you are using this product, since absorption through the skin is likely to lead to serious harm. All skin areas must be covered.

Failure to do so will lead to burns to the skin, and likely scarring. For help in selecting suitable equipment, consult AS 2161.

Eye Protection: Protective eyewear must be worn when using this product. Coverage should extend to all facial areas. Eye contact will prove at best painful and will probably cause irreversible damage if contact is other than brief. Consult AS1336 and AS/NZS 1337 for advice on Industrial Eye Protection.

Clothing: Clean impermeable overalls or protective clothing should always be worn when handling this product, preferably with an apron. If contaminated, laundry should be advised of the nature of the contamination, or, preferably, clothing should be destroyed. Consult AS2919 for advice on Industrial Clothing.

Safety Boots: Wearing safety boots in industrial situations is advisory. Consult AS/NZS2210 for advice on Occupational Protective Footwear.

Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

IV SAFE HANDLING INFORMATION

Safety Phrases are: S2, S20, S23, S26, S45, S7/9, S36/37/39. Keep out of reach of children. When using, do not eat or drink. Do not breathe vapours. In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre. In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately (show the label where possible). Keep container tightly closed and in a well ventilated place. Wear suitable protective clothing, gloves and eye/face protection.

Storage & Transport

This product is classed as UN2922, Dangerous Goods Class 8 Corrosive Substances. Proper Shipping name is CORROSIVE LIQUID, TOXIC, N.O.S.. Class 8 Corrosive Substances shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), 6 (Toxic Substances where the Toxic Substances are cyanides and the Corrosives are acids), 7 (Radioactive Substances), Foodstuffs and foodstuff empties. They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Poisonous Gases), 3 (Flammable liquids), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 6 (Toxic Substances except where the Toxic Substances are cyanides and the Corrosives are acids) and 9 (Miscellaneous Dangerous Goods). This product is a S7 Poison. Observe all relevant regulations regarding sale, transport and storage of this class of product. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames, and make sure that the product does not come into contact with substances listed under "Materials to avoid" below.

Spills & Disposals

In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Wear full protective chemically resistant clothing including face mask, face shield, gauntlets and self contained breathing apparatus. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. Recycle containers wherever possible. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Contaminated area may be neutralised by washing with weak or dilute alkali. This material may be suitable for approved landfill. Dispose of only in accord with all regulations. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Fire & Explosion Hazard

There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Flashpoint: Does not burn.

Flammability limits: Not applicable. This product does not burn.

Extinguishing Media: This product does not burn. Use extinguishing media suited to the materials that are burning. Water fog: Water fog or fine spray is the preferred medium for large fires.

Special Fire Fighting procedures: If a significant quantity of this product is involved in a fire, call the fire brigade. Immediately evacuate the area of unnecessary personnel. When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and self contained breathing apparatus. All skin areas should be covered. Ensure that no spillage enters drains or water courses.

Unusual Fire & Explosion Hazards: This product is unlikely to decompose at temperatures normally achieved in a fire. Likely to decompose only after heating to dryness followed by further strong heating.

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Stability: This product is unlikely to spontaneously decompose.

Polymerisation: This product is unlikely to spontaneously polymerise.

Decomposition Products: No significant quantities of decomposition products are expected at temperatures normally achieved in a fire.

Materials to avoid: bases.

V OTHER INFORMATION

This MSDS is prepared in accord with the Worksafe Australia document "National Code of Practice for the Preparation of Material Safety Data Sheets", 1994.

National Poisons Information Centre: Dial 13 1126 (from anywhere in Australia)

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