SAFETY DATA SHEET



RUST REMOVER

STEAMASTER AUSTRALIA PTY LTD

Catalogue number: Version No: 1.7 Issue date: 18/01/2017

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier Product name RUST REMOVER Synonyms Proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (contains ammonium bifluoride) Other means of identification Not Available Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses High performance rust spot remover Details of the manufacturer/importer Registered company name STEAMASTER AUSTRALIA PTY LTD

Registered company name	STEAMASTER AUSTRALIA PTY LTD	
Address 6 Reservoir Avenue, Greenacre SYDNEY NSW 2190 Australia		
Telephone	(02) 9796 3433	
Hot Line	1800 855 677	
Website	www.steamaster.com.au	
Email	sales@steamaster.com.au	

Emergency telephone number		
Association / Organisation	Poisons Information Centre	
Emergency telephone numbers	13 11 26	
Other emergency telephone numbers	Not Available	

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	7		
GHS Classification [1] Serious Eye Damage Category 1, Skin Corrosion/Irritation Category 1B, Acute Toxicity (Oral) Category 4, Metal Corrosion Category 1, STOT - SE (Resp. Irr.) Category 3			
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI		

Label elements

GHS label elements



SIGNAL WORD	DANGER	
Hazard statement(s)		
H318	Causes serious eye damage	
H314	Causes severe skin burns and eye damage	
H302	Harmful if swallowed	
H290	May be corrosive to metals	
H335	May cause respiratory irritation	

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P260	Do not breathe fumes / vapours / spray.	
P271 Use only outdoors or in a well-ventilated area.		
P280	P280 Wear protective gloves / protective clothing / eye protection / face protection.	
P234	P234 Keep only in original container.	
P270	Do not eat, drink or smoke when using this product.	

Precautionary statement(s) Response

P301+P310+P330+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.			
P303+P310+P363+P361+P353 IF ON SKIN (or hair): Immediately call a POISON CENTER or doctor. Take off immediately all contaminated clothing and wash before reuse. Rins water/shower. P305+P310+P351+P338 IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present a do. Continue rinsing.				
		P304+P310+P340	IF INHALED: Immediately call a POISON CENTER or doctor. Remove person to fresh air and keep in a position comfortable for breathing.	
P390	Absorb spillage to prevent material damage.			

Precautionary statement(s) Storage

P403+P405+P233 Store locked up, in a well-ventilated place. Keep container tightly closed.

Precautionary statement(s) Disposal

P501 Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1341-49-7	<10	ammonium bifluoride
7664-38-2	<10	<u>phosphoric acid</u>
79-14-1	<10	hydroxyacetic acid
151-21-3	<10	sodium lauryl sulfate

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES

Dagarinti		4:4	-:-	
Descripti	ion ot	TIFST	aıa	measures

Eye Contact	If this product comes in contact with the eyes: Obtain medical advice / attention without delay. Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. If instructed to do so, transport to hospital or doctor without delay.
Skin Contact	If there is evidence of severe skin irritation or skin burns: Avoid further contact. Immediately remove contaminated clothing, including footwear. Flush skin under running water for 15 minutes. Avoiding contamination of the hands, massage calcium gluconate gel into affected areas, pay particular attention to creases in skin. Contact the Poisons Information Centre or doctor. Continue gel application for at least 15 minutes after burning sensation cease s. If pain recurs, repeat application of calcium gluconate gel or apply every 20 minutes. If no gel is available, continue washing for at least 15 minutes, using soap if available. If patient is conscious, give six calcium gluconate or calcium carbonate tablets in water by mouth. Transport to hospital, or doctor, urgently.
Inhalation	If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay.
For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital or doctor without delay.	

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Following acute or short term repeated exposure to hydrofluoric acid:

Subcutaneous injections of Calcium Gluconate may be necessary around the burnt area especially under fingernails. Continued application of Calcium Gluconate Gel or subcutaneous Calcium Gluconate should then continue for 3-4 days at a frequency of 4-6 times per day. If a 'burning' sensation recurs, apply more frequently.

Eye contact pain may be excruciating and 2-3 drops of 0.05% pentocaine hydrochloride may be instilled, followed by further irrigation.

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SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Water spray or fog. Foam.

Extinguishing media

Dry chemical powder.

BCF (where regulations permit).

Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire	incompatibilit
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None known

Advice for firefighters

Fire Fighting

Alert Fire Brigade and tell them location and nature of hazard.

Wear full body protective clothing with breathing apparatus

Prevent, by any means available, spillage from entering drains or water course.

Use firefighting procedures suitable for surrounding area. Do not approach containers suspected to be hot

Cool fire exposed containers with water spray from a protected location.

If safe to do so, remove containers from path of fire.

Equipment should be thoroughly decontaminated after use.

Non-combustible.

Not considered to be a significant fire risk. Fire/Explosion Hazard

Acids may react with metals to produce hydrogen, a highly flammable and explosive gas. Heating may cause expansion or decomposition leading to violent rupture of containers.

May emit corrosive, poisonous fumes. May emit acrid smoke.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills

Check regularly for spills and leaks. Clean up all spills immediately.

Avoid breathing vapours and contact with skin and eyes.

Control personal contact with the substance, by using protective equipment.

Contain and absorb spill with sand, earth, inert material or vermiculite.

Wipe up

Place in a suitable, labelled container for waste disposal,

Major Spills

Clear area of personnel and move upwind. Wear full body protective clothing with breathing apparatus.

Prevent, by any means available, spillage from entering drains or water course.

Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations.

Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.

Personal Protective Equipment advice is contained in Section 8 of the SDS

SECTION 7 HANDLING AND STORAGE

Safe handling

Precautions for safe handling

Avoid all personal contact, including inhalation.

Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area.

WARNING: To avoid violent reaction, ALWAYS add material to water and NEVER water to material.

Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke

Keep containers securely sealed when not in use.

Avoid physical damage to containers.

Always wash hands with soap and water after handling.

Other information

Store in original containers. Keep containers securely sealed.

Store in a cool, dry, well-ventilated area.

Store away from incompatible materials and foodstuff containers.

Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

Suitable container	Keep only in original container.
Storage incompatibility	Avoid storage and contact with all alkalis. Corrosive to all metals.

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SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	ammonium bifluoride	Fluorides (as F)	2.5 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	phosphoric acid	Phosphoric acid	1 mg/m3	3 mg/m3	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
ammonium bifluoride	Ammonium hydrogen fluoride; (Ammonium bifluoride)	11 mg/m3	130 mg/m3	750 mg/m3
phosphoric acid	Phosphoric acid	Not Available	Not Available	Not Available
sodium lauryl sulfate	Sodium lauryl sulfate	3.9 mg/m3	43 mg/m3	260 mg/m3

Ingredient	Original IDLH	Revised IDLH
ammonium bifluoride	500 mg/m3	250 mg/m3
phosphoric acid	10,000 mg/m3	1,000 mg/m3
hydroxyacetic acid	Not Available	Not Available
sodium lauryl sulfate	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	
Eye and face protection	Safety glasses with unperforated side shields, OR Chemical goggles. Whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. Lens should be removed in a clean environment only after workers have washed hands thoroughly.
Skin protection	See Hand protection below
Hands/feet protection	Elbow length Neoprene gloves When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.
Body protection	See Other protection below
Other protection	Overalls. PVC Apron. Eyewash unit. Ensure there is ready access to a safety shower.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear colourless liquid

Physical state	Liquid	Relative density (Water = 1)	Not Available
Odour	Not Available	Molecular weight (g/mol)	Not Available
Odour threshold	Not Available	Auto-ignition temperature(°C)	Not Applicable
pH (as supplied)	3.2	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Partition coefficient n- octanol / water	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not flammable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Viscosity (cSt)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

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SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Contact with alkaline material liberates heat Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Corrosive acids can cause irritation of the respiratory tract, with coughing, choking and mucous membrane damage. There may be dizziness, headache, nausea and weakness. Acute effects of fluoride inhalation include irritation of nose and throat, coughing and chest discomfort. A single acute over-exposure may even cause nose bleed.
Ingestion	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. Ingestion of acidic corrosives may produce burns around and in the mouth, the throat and oesophagus. Immediate pain and difficulties in swallowing and speaking may also be evident. Fluoride causes severe loss of calcium in the blood, with symptoms appearing several hours later including painful and rigid muscle contractions of the limbs. Cardiovascular collapse can occur and may cause death with increased heart rate and other heart rhythm irregularities.
Skin Contact	Skin contact with acidic corrosives may result in pain and burns; these may be deep with distinct edges and may heal slowly with the formation of scar tissue. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Еуе	If applied to the eyes, this material causes severe eye damage. Direct eye contact with acid corrosives may produce pain, tears, sensitivity to light and burns. Mild burns of the epithelia generally recover rapidly and completely.
Chronic	Repeated or prolonged exposure to acids may result in the erosion of teeth, swelling and/or ulceration of mouth lining. Irritation of airways to lung, with cough, and inflammation of lung tissue often occurs. Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Not considered to be ecotoxic.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
phosphoric acid	HIGH	HIGH
hydroxyacetic acid	LOW	LOW
sodium lauryl sulfate	HIGH	HIGH

Bio accumulative potential

Ingredient	Bioaccumulation
phosphoric acid	LOW (LogKOW = -0.7699)
hydroxyacetic acid	LOW (LogKOW = -1.11)
sodium lauryl sulfate	LOW (BCF = 7.15)

Mobility in soil

Ingredient	Mobility
phosphoric acid	HIGH (KOC = 1)
hydroxyacetic acid	HIGH (KOC = 1)
sodium lauryl sulfate	LOW (KOC = 10220)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations

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SECTION 14 TRANSPORT INFORMATION

Labels Required Marine Pollutant HAZCHEM 2X Land transport (ADG) **UN** number 3264 Packing group UN proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (contains ammonium bifluoride) **Environmental hazard** No relevant data Class 8 Transport hazard class) Sub risk 6.1 Special provisions 274 Special precautions for user Limited quantity

SECTION 15 REGULATORY INFORMATION

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

AMMONIUM BIFLUORIDE (1341-49-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Inventory of Chemical Substances (AICS)
Australia Inventory of Chemical Substances (AICS)
Australia Hazardous Substances Information System - Consolidated Lists
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

PHOSPHORIC ACID (7664-38-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Inventory of Chemical Substances (AICS)
Australia Hazardous Substances Information System - Consolidated Lists

SODIUM LAURYL SULFATE (151-21-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists Australia Inventory of Chemical Substances (AICS)

SECTION 16 OTHER INFORMATION

Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA; Permissible Concentration-Time Weighted Average PC-STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer

ACGIH: American Conference of Government Industrial Hygienists

STEL: Short Term Exposure Limit

Temporary Emergency Exposure Limit TEEL:

IDLH: Immediate Danger to Life or Health Concentrations

Odour Safety Factor NOAEL: No Observed Effects Level Threshold Limit Value TLV: LOD: Limit Of Detection OTV: Odour Threshold Value Bio Concentration Factors Biological Exposure Index

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