



Material Safety Data Sheet

Hazardous According To The Criteria Of NOHSC

1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<u>Product Name:</u>	RED WHEEL ACID
<u>Other Name:</u>	None
<u>Manufacturer's Product Code:</u>	
<u>Recommended Use:</u>	Acidic aluminium cleaner. Product is used diluted
<u>Supplier Name:</u>	AUTOSMART AUSTRALIA
<u>Supplier Address:</u>	AUTOSMART AUSTRALIA 11 DARRAMBAL CLOSE RATHMINES NSW 2283 www.autosmartaustralia.com.au www.autosmartinternational.com autosmart@autosmartaustralia.com.au
<u>Telephone No.:</u>	02 49 75 14 88 (Mon to Fri, 08:00 – 16:00 AEST) (General Information. Transport Information. Mild medical Information)
<u>Emergency No.:</u>	0011 44 7808 971 321 (24 Hrs) (Autosmart International) 13 11 26 (24 Hours) Poison Information Centre Australia

2 HAZARDS IDENTIFICATION

<u>HAZARD DESIGNATION:</u>	Hazardous According To The Criteria Of NOHSC
<u>Hazard Category:</u>	TOXIC, CORROSIVE
<u>RISK PHRASES:</u>	R23/24/25 Toxic by inhalation, in contact with skin and if swallowed. R34 Causes burns. R37 Irritating to respiratory system.
<u>SAFETY PHRASE:</u>	S1/2 Keep locked up and out of the 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. S27 Take off immediately all contaminated clothing. S28 After contact with skin, wash immediately with plenty of water. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S38 In case of insufficient ventilation, wear suitable respiratory equipment. S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

S62. If swallowed do not induce vomiting. Seek medical advice immediately and show the container or label.

ADG CLASSIFICATION:

CLASS 8 and 6 “dangerous goods” for transport by road or rail according to the Australian Code for the Transport of Dangerous Good by Road and Rail.

SUSDP CLASSIFICATION:

Schedule 6 (Standard for the Uniform Scheduling of Drugs and Poisons)

3 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NUMBER:	PROPORTION (% W/W)
2-butoxyethanol	111-76-2	>1%
Hydrofluoric Acid	7664-39-3	5-10%
Phosphoric Acid	7664-38-2	5-10%
Other ingredients determined not to be hazardous		To 100%

4 FIRST AID MEASURES

IF POISONING OCCURS, IMMEDIATELY CONTACT A DOCTOR OR POISONS INFORMATION CENTRE (TELEPHONE 13 11 26), AND FOLLOW THE ADVICE GIVEN. SHOW THIS MATERIAL SAFETY DATA SHEET TO A DOCTOR.

Inhalation: Remove person from source of exposure. Keep at rest. Seek urgent medical attention.

Skin Contact: Wash affected areas with plenty of water, preferably under a shower whilst removing contaminated clothing. Care should be taken as product may be trapped under clothing, footwear or a wrist-watch. Apply calcium gluconate gel and massage into the burnt area. Repeat gel applications for 15 minutes after the pain from the burn is relieved. Seek urgent medical advice and show the medical practitioner the Material Safety Data Sheet. Launder clothing before re-use. If calcium gluconate gel not available continue washing with iced water until medical advice sought

Eye contact: Immediately rinse eyes thoroughly, including under eyelids, with running water for at least 15 minutes. Seek immediate medical advice.

Ingestion: Do NOT induce vomiting. Rinse mouth with water. Give 6 effervescent tablets of calcium gluconate in water by mouth. Seek immediate medical advice.

First Aid Facilities: Provide an eyewash station in the workplace. Calcium gluconate gel and tablets should always be available. Emergency Shower.

Symptoms: Symptoms of intoxication may not appear.

Medical attention: First aiders must not enter without appropriate protective equipment. Immediate specific treatment is necessary in case of poisoning. Use antidote for HF poisoning. The patient must be kept at rest and be kept under medical supervision, even if there are no immediate symptom.

Define a first aid plan of action prior to commencing work with this product.

5 FIRE FIGHTING MEASURES

Extinguishing media: Stay upwind. Evacuate personnel away from fumes. Keep containers cool by spraying with water. Do not breathe fumes. Wear S.C.B.A and suitable Protective clothing. Use powder or CO₂ extinguishers. Do not use a water jet from a fire

Hazards from combustion products:

Toxic vapours (halogenated compounds)

Precautions for fire fighters:

Non flammable but may present risk if involved in a fire. Reacts on contact with water: toxic vapours (halogenated compounds) are released. Fire fighters should wear full protective clothing and self-contained breathing apparatus. Do not

release contaminated water into the environment. Keep intact containers cool by spraying with water.

ADDITIONAL INFORMATION:**HAZCHEM CODE: 2W****6 ACCIDENTAL RELEASE MEASURES**

Wear full protective clothing. Isolate the spillage. WARN ALL PERSONNEL. Absorb in inert material, such as sand, earth or vermiculite. Cover with Soda Ash, Sodium Bicarbonate or Sodium Carbonate and mix to a slurry. Scoop up and store in sealed labelled containers for disposal. Wash site of spillage with copious amounts of water.

Spillage's May Be Slippery.

Fire/Explosion Hazard:

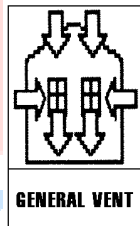
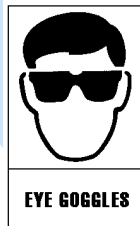
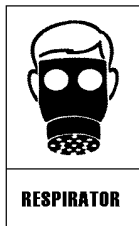
This is a water-based product and is not combustible under normal condition. In fire will produce toxic fumes. Wear self-contained breathing apparatus and full protective clothing. Use extinguisher media appropriate for the surrounding fire.

7 HANDLING AND STORAGE**Handling:**

Ensure that the Material Safety Data sheet has been read thoroughly. Use only in well ventilated areas. Avoid direct contact with material. Ensure that product is not used by junior or untrained personnel. Wear Chemical Resistant goggles and face shield. Wear Acid resistant Gloves and impervious clothing to prevent skin contact. In confined areas and spraying product wear a canister respirator approved for use with Hydrofluoric Acid contaminated atmospheres.

Storage:

Store in a cool dry place in original sealed containers. Classified as a corrosive/toxic liquid. Refer to state regulations for storage and Australian Code for the Transport of Dangerous Goods.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Standards:**

Hydrofluoric Acid TWA 8 hours 3ppm STEL 10 mins 6ppm

Engineering Controls:

Ensure product is diluted in accordance with label.
Use in a well-ventilated area and avoid spraying product, if possible.
Employ measures that reduce contact with product.

Personal Protective Equipment:**EYES:**

Avoid contact with eyes. Wear safety goggles and face shield.

CLOTHING:

Wear suitable protective clothing. Plastic suiting with elasticated cuffs and closed neck may be necessary if risk of splashing. Boots. Protective clothing must be stored separately from private clothing.

GLOVES:

Avoid contact with skin. Wear Acid Resistant gloves.

RESPIRATORY:

Wear an approved respirator to prevent inhalation, if other control measures are inadequate.

OTHER:

Do not eat, drink or smoke until after washing. Wash thoroughly after handling. After each day's use wash gloves, goggles and contaminated clothing.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	RED LIQUID
Odour:	Acrid
Vapour Pressure:	not relevant.
Vapour Density:	Not available
Boiling Point:	Approximately 100°C
Freezing/melting point:	Not available
Solubility:	Soluble in Water.
Density:	1.04 –1.05 @ 20 °C
pH Neat:	1.0
Flashpoint:	Not relevant
Flammability (explosive) limits:	
Auto-ignition temperature:	
Percent volatiles:	
Octanol/water partition coefficient:	Not available
Formulation:	Acidic Cleaner

10 STABILITY AND REACTIVITY

Chemical stability:	Stable at room temperature
Hazardous polymerisation:	not available
Conditions to avoid:	Reacts with most metals with evolution of hydrogen. Reacts violently with bases with the evolution of heat.
Incompatible materials:	Alkalis and metals. Attacks glass.
Hazardous decomposition products:	Liberates harmful gases from certain chemical salts, e.g. cyanides, nitrates, sulphites, acetylides and carbides. Releases hydrofluoric acid on thermal decomposition.
Hazardous reactions:	Not available

11 TOXICOLOGICAL INFORMATION**Inhalation:**

Toxic by inhalation. Inhalation of spray or vapour will cause irritation and sore throat. May cause ulcers in the respiratory tract. Concentrations of 50-250ppm are dangerous even for brief exposures. Risk of causing lung oedema. Inhalation may be fatal..

Skin contact:

Liquid or vapour can cause serious burns. The effects may not be immediate. May damage subcutaneous tissues causing them to become blanched and bloodless. Gangrene of the effected areas may follow. Long term exposure can cause accumulation of fluoride in the bones (fluorosis).

Eye contact:

The material should not be allowed to contact the eyes. Causes burns to the eyes. Contact with liquid can rapidly cause permanent damage.

Ingestion:

Will cause severe irritation and damage to the throat and stomach resulting in vomiting, diarrhoea, abdominal pain, nausea and even collapse. Vomiting may cause lung damage

Acute: Oral toxicity: LD50 rat 1.07mg/L. (1 hour)

Dermal toxicity: LD50 rabbit: not available

Inhalation toxicity: Irritating to Respiratory system.

Skin irritation: Corrosive/Toxic

Eye irritation: Corrosive

Sensitisation: Long term exposure can cause accumulation of Fluoride in the bones (Fluorosis)

Chronic: Prolonged exposure to vapours may cause respiratory difficulties and pulmonary oedema.

12 ECOLOGICAL INFORMATION

Fish toxicity: Data not available

Daphnia toxicity:	Data not available
Toxicity to algae:	Data not available
Bird toxicity:	Data not available
Bee toxicity:	Data not available
Other:	No data available

Environmental fate, persistence and degradation:

Degrades rapidly in soil and water.

13 DISPOSAL CONSIDERATIONS

Dilute the acid > 100 times with water and neutralise with calcium hydroxide. Absorb in inert material, such as sand, earth or vermiculite. Cover with Soda Ash, Sodium Bicarbonate or Sodium Carbonate and mix to a slurry. Scoop up and store in sealed labelled containers for disposal. Wash site of spillage with copious amounts of water. Do not discharge into drains. Do not incinerate. Dispose of waste material via a licensed waste disposal contractor. Classified as special waste for controlled disposal.

14 TRANSPORT INFORMATION

UN number:	1790
Proper shipping name:	HYDROFLUORIC ACID
Class and Subsidiary Risk:	CLASS 8 and 6 “dangerous goods” for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
Packing Group:	II
EPG:	2W

15 REGULATORY INFORMATION

Poison Schedule number 6 allocated

16 OTHER INFORMATION

Preparation information: Only trained personnel should use this material.

MSDS Issue

Issue	No.1
Prepared:	04/02/2014
Next review date:	04/02/2019
Reason for Update	Review & update

Prepared by Autosmart International, Lynn Lane, Shenstone, Lichfield, Staffordshire, WS14 0DH, Great Britain

www.autosmartinternational.com

rbutler@autosmart.co.uk

Tel: +44 1543 481616

Data Sources and References:

National Code of Practice for the preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011 (2003)].
Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) No 23

National code of practice for the storage and handling of Workplace Dangerous Goods [NOHS:2017 (2001)]

National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHS:21003 (1995)]

Disclaimer:

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

END OF MSDS