

Product Name **TORNADO**
1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name RJS PRODUCTS PTY LTD
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Webstie www.rjsproducts.com.au
Synonym(s) NOT APPLICABLE • PRODUCT CODE – 398
Use(s) TILE CLEANER - CERAMIC TILES, QUARRY PAVERS AND CONCRETE FLOORS CLEANER.
SDS Date 16 February 2011 v0
 4 July 2012 v1

2. HAZARDS IDENTIFICATION
CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC/ASCC CRITERIA
RISK PHRASES

R35 Causes severe burns

SAFETY PHRASES

S1/2 Keep locked up and out of reach of children

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

S45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

CLASSIFIED AS A DANGEROUS GOODS BY THE CRITERIA OF THE ADG CODE

UN No.	1760	DG Class	8	Subsidiary Risk(s)	None Allocated
Packing Group	III	Hazchem Code	2R	EPG	8A1

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
POTASSIUM HYDROXIDE	KOH	1310-58-3	10-30%
SODIUM METASILICATE PENTAHYDRATE	Na ₂ SiO ₃ .5H ₂ O	10213-79-3	1-10%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	Remainder

4. FIRST AID MEASURES

Eye	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poison Information Centre or a doctor, or for at least 15 minutes.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre or a doctor.
Inhalation	If inhaled, remove from contaminated area. To protect rescuer, use an Air-line respirator where an inhalation risk exists. Apply artificial respiration if not breathing.
Ingestion	For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
Advice to Doctor	CORROSIVE POISONING TREATMENT: Immediate treatment preferably in a hospital is mandatory. In treating corrosive poisoning. DO NOT INDUCE VOMITING; DO NOT ATTEMPT GASTRIC LAVAGE; and DO NOT ATTEMPT TO NEUTRALISE THE CORROSIVE SUBSTANCE. Vomiting will increase the severity of damage to the oesophagus as the corrosive substance will again come in contact with it. Attempting gastric lavage may result in perforating either the oesophagus or stomach.

First Aid Facilities Eye wash facilities and safety shower should be available.

5. FIRE FIGHTING MEASURES

Flammability	Non flammable. May evolve toxic gases if strongly heated to decomposition.
Fire and Explosion	Non flammable. May evolve flammable hydrogen gas in contact with some metals.
Extinguishing	Non flammable. Prevent contamination of drains or waterways.
Hazchem Code	None Allocated.

6. ACCIDENTAL RELEASE MEASURES

Spillage	If spilt (bulk), contact emergency services if appropriate. Wear splash-proof goggles and PVC/rubber gloves, an Air-line respirator (where an inhalation risk exists). Absorb spill with sand or similar and place in sealed containers for disposal. Wash spill site down with water. For small amounts, dilute with water and flush to sewer. Caution: surfaces may be slippery.
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7. STORAGE AND HANDLING

Storage	Store in cool, dry, well ventilated area, removed from acids, combustible materials and foodstuffs. Ensure containers are adequately labeled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills.
Handling	Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Stds	Potassium Hydroxide (Peak limitation) TWA: 2.0mg/m3 (Reference: ASCC(AUS))
Biological Limits	No biological limit allocated.
Engineering Controls	Ensure adequate natural ventilation. Maintain vapour levels below the recommended exposure standard.
PPE	Wear splash-proof goggles and PVC or rubber gloves, rubber, face shield and coveralls. Where an inhalation risk exists, wear a type A (organic vapor) respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	BROWN THIN LIQUID	Solubility (Water)	SOLUBLE
Odour	SLIGHT CAUSTIC ODOUR	Specific Gravity	1.20 TO 1.22
Ph	13.5 – 14.0	Volatiles	NOT AVAILABLE
Vapour Pressure	NOT AVAILABLE	Flammability	NON FLAMMABLE
Vapour Density	NOT AVAILABLE	Flash Point	NOT RELEVANT
Boiling Point	100°C (Approximately)	Upper Explosion Limit	NOT RELEVANT
Melting Point	NOT AVAILABLE	Lower Explosion Limit	NOT RELEVANT
Evaporation Rate	NOT AVAILABLE		

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended conditions of storage.
Material to Avoid	Incompatible with oxidizing agent (e.g. hypochlorite, peroxide) and strong acids (eg. Hydrochloric acid).
Decomposition	May evolve toxic gas if heated to decomposition.
Hazardous Reactions	Polymerization is not expected to occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard	Corrosive. Use safe work practices to avoid eye or skin contact, spray must generation or inhalation. However due to the low vapour pressure, an inhalation hazard is not anticipated with normal use.
Eye	Corrosive . Contact may result in irritation, lacrimation, pain, redness and conjunctivitis. Prolonged contact may result in possible burns.
Inhalation	Corrosive- Irritant. Over exposure to mists or vapours (if sprayed) may result in irritation of the nose and throat with coughing. At high levels nausea, dizziness and headache. Low vapour pressure, considerably reduces the inhalation hazard.
Skin	Corrosive . Contact may result in drying the skin, rash, dermatitis and burns.

Ingestion Corrosive. Ingestion may result in burns to the mouth and throat, nausea, vomiting, abdominal pain and diarrhea.

Toxicity Data POTASSIUM HYDROXIDE (1310-58-3)
LD50 (Ingestion):273mg/kg(rat)

SODIUM METASILICATE PENTAHYDRATE (10213-79-3)

LD50(ingestion): 770mg/kg (mouse)
LDLo(Ingestion): 250mg/kg(dog)
LDLo(Intraperitoneal): 200mg/kg(guinea pig)
TDLo(Ingestion):15g/kg(rat)

12. ECOLOGICAL INFORMATION

Environment WATER: If released to waterways, alkaline products may change the pH of the waterway. Fish will die if the pH reaches 10-11 (goldfish 10.9, bluegill 10.5). SOIL: May leach to groundwater with toxic effects on aquatic life as above. ATMOSPHERE: Not expected to reside in the atmosphere. Drops or particles released to atmosphere should be removed by gravity and/or be rained out.

13. DISPOSAL CONSIDERATIONS

Waste Disposal For small amounts absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Contact the manufacturer for additional information if larger amounts are involved. Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOODS BY THE CRITERIA OF THE ADG CODE

Shipping Name	CORROSIVE LIQUID,N.O.S.			Subsidiary Risk(s)	None Allocated
UN No.	1760	DG Class	8	EPG	8A1
Packing Group	III	Hazchem Code	2R		

15. REGULATORY INFORMATION

Poison Schedule Classified as Schedule 6(S6) Poison using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

AICS All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Additional Information

ABBREVIATIONS:

ADB - Air-Dry Basis.
BEI - Biological Exposure Indice(s)
CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.
CNS - Central Nervous System.
EINECS - European Inventory of Existing Commercial chemical Substances.

IARC - International Agency for Research on Cancer.
M - moles per litre, a unit of concentration.
mg/m³ - Milligrams per cubic metre.
NOS - Not Otherwise Specified.
NTP - National Toxicology Program.
OSHA - Occupational Safety and Health Administration.
pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm - Parts Per Million.
RTECS - Registry of Toxic Effects of Chemical Substances.
TWA/ES - Time Weighted Average or Exposure Standard.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Clean Plus Chemicals report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Clean Plus Chemicals report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Report Status

This Safety Data Sheet document has been compiled by Clean Plus Chemicals. Further clarification regarding any aspect of this product should contact Clean Plus Chemicals. While Clean Plus Chemicals has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Clean Plus Chemicals accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

End of Report

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