

Material Safety Data Sheet

Product Name **TB-25 TIG BRUSH WELD CLEANING SOLUTION**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name ENSITECH PTY LTD
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Synonym(s)

Use(s) TIG BRUSH WELD CLEANING SOLUTION

SDS Date 14 Nov 2008

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO HAZARDOUS SUBSTANCES [CLASSIFICATION] REGULATIONS 2001

HSNO CLASSIFICATION

6.1D Substances that are acutely toxic.
8.1A Substances that are corrosive to metals.
8.2C Substances that are corrosive to dermal tissue.
8.3A Substances that are corrosive to ocular tissue.
9.1D Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action.
9.3C Substances that are harmful to terrestrial vertebrates.

HAZARD STATEMENT

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H401 Toxic to aquatic life.
H402 Harmful to aquatic life.
H413 May cause long lasting harmful effects to aquatic life.
H433 Harmful to terrestrial vertebrates.

PREVENTION STATEMENT

P102 Keep out of reach of children (applies only where the substance is available to the general public).
P103 Read label before use (applies only where the substance is available to the general public).
P234 Keep only in original container.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment. This statement does not apply where this is the intended use.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

RESPONSE STATEMENT

P101 If medical advice is needed, have product container or label at hand (applies only where the substance is available to the general public).
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment is advised - see first aid instructions.
P330 Rinse mouth.
P363 Wash contaminated clothing before reuse.

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P390 Absorb spillage to prevent material damage.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

STORAGE STATEMENT

P405 Store locked up.
P406 Store in corrosive resistant container with a resistant inner liner.

DISPOSAL STATEMENT

P501 In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE:DANGEROUS GOODS 2005; NZS 5433:2007, UN, IMDG OR IATA

UN No.	1805	DG Class	8	Subsidiary Risk(s)	None Allocated
Packing Group	III	Hazchem Code	2R	EPG	8A1

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Content
PHOSPHORIC ACID	7664-38-2	45-55%
WATER	7732-18-5	45-55%
PROPRIETARY ADDITIVE	Not Available	1-2%
PROPRIETARY ADDITIVE	Not Available	1-2%

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.

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs wash off with soap and water and see doctor if irritation persists. For chronic exposure remove clothes, have a shower and call a doctor.

Ingestion For advice, contact a Poison Information Centre on 0800 764 766 (0800 POISON) or +643 479 7248 (New Zealand) or a doctor (at once). If swallowed, do not induce vomiting.

Advice to Doctor Treat symptomatically

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

5. FIRE FIGHTING MEASURES

Flammability Non flammable. May evolve toxic gases (phosphorus oxides) when heated to decomposition. Contact with most metals may liberate flammable hydrogen gas.

Fire and Explosion Non flammable. Treat as per requirements for Surrounding Fires: Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

Extinguishing Non flammable. Prevent contamination of drains or waterways, absorb runoff with sand or similar.

Hazchem Code 2R

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6. ACCIDENTAL RELEASE MEASURES

Spillage For liquid spills: contact emergency services. Clear area of unprotected personnel. Ventilate area where possible. Wear PVC gloves, a Full-face Type B (Inorganic and acid gas) respirator or Air-line respirator, full-length PVC coveralls and boots. Cover with sodium bicarbonate or 50-50 mixture of sodium carbonate & calcium hydroxide. Collect for complete neutralisation and appropriate disposal.

7. STORAGE AND HANDLING

Storage Store in cool, dry, well ventilated area, removed from alkalis, metals, nitromethane, sodium tetrahydroborate, heat sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use.

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. This solution should not be used in a spraying application.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Stds	Ingredient	Reference	TWA		STEL	
			ppm	mg/m3	ppm	mg/m3
	Phosphoric acid	OSH (NZ)	--	1.0	--	--

Engineering Controls Do not inhale vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical extraction ventilation is recommended.

PPE Wear splash-proof goggles and full-length PVC or full-length rubber gloves. Where an inhalation risk exists, wear an acid resistant (AS 1716) Type B (Inorganic gases and vapours) respirator



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	CLEAR LIGHT RED LIQUID	Solubility (Water)	SOLUBLE
Odour	SWEET	Specific Gravity	1.36 g/mL
pH	1 to 3	% Volatiles	NOT AVAILABLE
Vapour Pressure	NOT AVAILABLE	Flammability	NON FLAMMABLE
Vapour Density	NOT AVAILABLE	Flash Point	NOT RELEVANT
Boiling Point	145°C	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.

Conditions to Avoid Avoid heat, sparks, open flames and other ignition sources.

Material to Avoid Incompatible with alkalis (eg. hydroxides), metals (evolving hydrogen gas), nitromethane and sodium tetrahydroborate.

Hazardous Decomposition Products May evolve toxic gases (phosphorus oxides) when heated to decomposition.

Polymerization Polymerization is not expected to occur.

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11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	Highly corrosive. Use safe work practices to avoid eye or skin contact and vapour generation - inhalation. Chronic or acute exposure at high levels may result in severe skin, eye and respiratory burns with permanent lung and tissue damage. If diluted, the risk of adverse health effects is greatly reduced.
Eye	Highly corrosive - severe irritant. Contact may result in irritation, lacrimation, pain, redness, conjunctivitis and corneal burns with possible permanent damage.
Inhalation	Corrosive. Over exposure may result in irritation, coughing and bronchitis. At high level exposure may result in ulceration, lung tissue damage, chemical pneumonitis and pulmonary oedema. Symptoms may be delayed following exposure.
Skin	Corrosive. Contact may result in irritation, redness, itching, pain, rash, dermatitis and burns. Prolonged or repeated contact may result in ulceration.
Ingestion	Highly corrosive. Ingestion may result in burns to the mouth and throat, nausea, vomiting, ulceration of the gastrointestinal tract, oedema, rapid pulse, shock, unconsciousness, convulsions and death.
Toxicity Data	PHOSPHORIC ACID (7664-38-2) LD50 (Ingestion): 1530 mg/kg (rat) LD50 (Skin): 2740 mg/kg (rabbit)

12. ECOLOGICAL INFORMATION

Environment	Phosphoric acid is hazardous to aquatic life at high concentrations. While acidity may be reduced by natural water minerals, the phosphate may persist indefinitely. When spilled onto soil, it will permeate downward, and may dissolve some of the soil matter, especially carbonate-based materials. Some acid will be neutralised, however significant amounts will remain for transport to groundwater.
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13. DISPOSAL CONSIDERATIONS

Waste Disposal	Wearing the protective equipment detailed above, neutralise to pH 6-8 by SLOW addition to a saturated sodium bicarbonate solution or similar basic solution. Dilute with excess water and flush to drain. Waste disposal should only be undertaken in a well ventilated area.
Legislation	Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION



CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE:DANGEROUS GOODS 2005; NZS 5433:2007, UN, IMDG OR IATA

Shipping Name	PHOSPHORIC ACID				
UN No.	1805	DG Class	8	Subsidiary Risk(s)	None Allocated
Packing Group	III	Hazchem Code	2R	EPG	8A1
IATA					
Shipping Name	PHOSPHORIC ACID				
UN No.	1805	DG Class	8	Subsidiary Risk(s)	None Allocated
Packing Group	III				
IMDG					
Shipping Name	PHOSPHORIC ACID				
UN No.	1805	DG Class	8	Subsidiary Risk(s)	None Allocated
Packing Group	III				

15. REGULATORY INFORMATION

Approval Code	HSR001545
Group Name	Phosphoric acid, >10% aqueous solution

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HSNO Controls Refer to the ERMA website for more information: www.ermanz.govt.nz

16. OTHER INFORMATION

Additional Information ACIDS: When mixing acids with water (diluting), caution must be taken as heat will be generated which causes violent spattering. Always add a small volume of acid to a large volume of water, NEVER the reverse.

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

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 Chem Alert 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 Chem Alert 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 document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT 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, RMT 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.

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SDS Date: 14 Nov 2008

End of Report