

**MATERIAL SAFETY DATA SHEET****PHOSPHORIC ACID**

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**1. IDENTIFICATION OF CHEMICAL**

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**CHEMICAL NAME:** ORTHO PHOSPHORIC ACID

**SYNONYMS:** Phosphoric Acid, White Phosphoric Acid

**CAS NO:** 7664-38-2

**EINECS NUMBER:** 231-633-2

**COMPANY IDENTIFICATIONS:** Tan International Ltd  
Tayview Industrial Estate, PERTH PH2 8DG  
Tel: 01738 632909 Fax: 01738 632901

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**2 COMPOSITION**

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INGREDIENT NAME	CAS NO	CONTENT	HEALTH (CLASS)	RISK (R NO)
Phosphoric Acid	7664-38-2	15-85%	C	R34

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**3. HAZARD IDENTIFICATION**

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**MAIN HAZARDS:** Causes burns

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**4. FIRST AID MEASURES**

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**EYES:** Promptly wash eyes with lots of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention immediately.

**SKIN:** Remove affected person from source of contamination. Promptly flush contaminated skin with water. Promptly remove clothing if soaked through and flush the skin with water.

**INHALATION:** Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. When breathing is difficult, properly trained personnel may assist affected person by administering 100% oxygen. Keep the affected person warm and at rest. Get prompt medical attention.

**INGESTION:** **NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS!** Promptly let affected drink lots of water to dilute the swallowed chemical. Get medical attention immediately.

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**5. FIRE FIGHTING MEASURES**

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**EXPOSURE HAZARDS:** May develop highly toxic or corrosive fumes if heated. May form toxic or explosive vapours in presence of certain metals. May ignite other combustible materials.

**SUITABLE EXTINGUISHER:** Cool containers exposed to flames with water from the side until well after the fire is out. Use foam, powder or water-spray.

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**6. ACCIDENTAL RELEASE MEASURES**

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**CLEAN-UP PROCEDURES:** Stop leak if possible without risk. DO NOT touch spilled material! Collect with non-combustible absorbent material. Dike for large spills. Do not allow runoff to enter water-courses, drains or sewers. Neutralize with alkaline material (Lime, crushed limestone, sodium bicarbonate or soda ash). Flush area with water. Clean-up personnel should use liquid contact protection.

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**7. HANDLING AND STORAGE**

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**HANDLING:** Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Wear full protective clothing for prolonged exposure and/or high concentrations. Do not use contact lenses.

**STORAGE:** May attack some plastics, rubber and coatings. Keep in cool, dry, ventilated storage and closed containers.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**PROTECTIVE EQUIPMENT:** Wear splash-proof eye goggles to prevent any possibility of eye contact. Contact lenses should be worn when working with this chemical. Use protective gloves made of rubber (natural latex), neoprene, nitrile, polyethylene.

<b>EXPOSURE LIMITS:</b>	<b>LT EXP (8 hrs)</b>	<b>ST EXP (15 min)</b>
	1 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>

Exposure should be reduced to the lowest which is reasonable and practicable.

**PHOSPHORIC ACID**

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>CHEMICAL FORMULA:</b>	H <sub>3</sub> PO <sub>4</sub>
<b>APPEARANCE:</b>	Colourless
<b>SOLUBILITY DESCRIPTION:</b>	Soluble in water, soluble in alcohol
<b>BOILING POINT/RANGE:</b>	
<b>MELTING POINT/RANGE:</b>	
<b>SPECIFIC GRAVITY (water =1):</b>	max.1.874 @ 25°C (Varies according to concentration)
<b>EXPLOSIVE LIMITS: LOWER:</b>	
<b>UPPER:</b>	
<b>FLASH POINT:</b>	
<b>PART COEFFICIENT:</b>	
<b>FLAMMABILITY:</b>	
<b>AUTOFLAMMABILITY:</b>	
<b>VAPOUR PRESSURE (mmHg):</b>	0.0285 @ 20°C
<b>RELATIVE DENSITY:</b>	
<b>pH:</b>	1.50 approx.

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**10. STABILITY AND REACTIVITY**

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<b>STABILITY:</b>	Avoid heat, sparks, flames.
<b>CONDITIONS TO AVOID:</b>	Bases, alkalis (inorganic). Massive, solid metal. Powdered metal.

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**11. TOXICOLOGICAL INFORMATION**

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<b>HEALTH EFFECT:</b>	<b>SKIN:</b>	Irritation/burns.
	<b>EYES:</b>	Irritation/burns to eyes and mucous membranes.
	<b>INHALATION:</b>	General respiratory distress, unproductive cough.
	<b>INGESTION:</b>	Vomiting. May cause severe internal injury.

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**12. ECOLOGICAL EFFECTS**

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**13. DISPOSAL CONSIDERATIONS**

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<b>DISPOSAL METHODS:</b>	Mix slowly with NaHCO <sub>3</sub> , neutralize and flush to sewer with lots of water. Absorb in vermiculite or dry sand, dispose in licensed special waste. Neutralize with soda ash/slaked lime and discharging to sewer with lots of water. Confirm disposal procedures with environmental engineer and local regulations. Wash to drains with lots of water.
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**14. TRANSPORT INFORMATION**

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**ROAD**

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**UN NO:** 1805  
**HAZCHEM CODE:** 2R  
**ADR CLASS :** 8  
**CEFIC TEC (R) NO:** 82  
**ADR ITEM NO:** 17 (C)  
**PACKING GROUP:** II  
**ADR LABEL NO:** 8  
**LABEL FOR CONVEYANCE:** Corrosive substance (class 8). (black/white halved diamonds with corrosive symbol).

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**AIR**

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**UN NO:** 1805  
**AIR TRANSPORT CLASS:** 8  
**AIR PACK GR:** III

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**SEA**

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**UN NO:** 1805                      **IMDG PAGE NO:** 8194  
**SEA TRANSPORT CLASS:** 8      **SEA PACK GR:** II  
**PHOSPHORIC ACID**

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**15. REGULATORY INFORMATION**

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**CLASSIFICATION:** Corrosive  
(orange/black with test tube symbol)



**RISK PHRASES:** R34: Causes burns.

**SAFETY PHRASES:** S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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

**“This product is labelled in accordance with current CHIP LEGISLATION”.**

**PHOSPHORIC ACID**

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**16. ADDITIONAL INFORMATION**

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**LEGAL DISCLAIMER:**

The information contained in this MSDS does not constitute a hazard assessment, and should not replace the user's own assessment of risks as required by other Health & Safety Legislation.

This advice is given by Tan International Ltd. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.