

# MATERIAL SAFETY DATA SHEET

## pH DOWN

**Statement of Hazardous Nature:** Classified as hazardous according to criteria of Worksafe Australia.

### MANUFACTURER:

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### SECTION 1 NAME AND HAZARD SUMMARY

Material Name:

**pH DOWN**

**Hazardous Goods**

### SECTION 2 HAZARDOUS INGREDIENTS

Ingredient	CAS No	%	TLV
Phosphoric Acid	7664-38-2	75-85%	N/A

All chemical ingredients appear on the EPA TSCA Inventory. Values are not product specification.

### SECTION 3 PHYSICAL DATA

Boiling Point:	158°C
Vapour Pressure:	No Data
Solubility in Water:	Completely Soluble
pH:	<1
Specific Gravity:	1.69
Appearance:	Clear, colourless, syrupy liquid.
Odour:	No Odour.

### SECTION 4 FIRE AND EXPLOSION HAZARD DATA

Material is non-flammable. Material is stable under normal conditions of use. Strong caustics will liberate much heat and cause spattering. Most metals will cause formation of flammable and explosive hydrogen gases. Bases react violently. Sulphide, phosphide, cyanide, carbide and silicides reactions release poisonous gases. Hazardous decomposition products include toxic gases and vapours (phosphoric acid fumes may be released). May liberate phosphorous oxide.

## SECTION 5 EXTINGUISHING MEDIA

Use water spray, dry chemical, carbon dioxide, or foam type extinguishers. DO NOT use a direct water stream. Contact with most metals causes hydrogen which may form flammable mixtures with air. Fire fighters should wear a self contained breathing apparatus and full impermeable protective clothing. Keep containers cool by spraying with water.

## SECTION 6 SPILLS AND DISPOSAL

### SPILLS:

Wear full protective clothing, boots, protective gloves and goggles and a self contained breathing apparatus. Keep unnecessary people away. Keep non-neutralised material out of sewers, storm drains, surface waters and soil.

Ventilate area of spill or leak. Apply sand, fly ash or cement to absorb fluid. Neutralise with lime, soda ash, calcium carbonate or sodium bicarbonate and collect up into suitable containers for disposal.

### DISPOSAL: (After above treatment)

Neutralised acid slurry can be buried in an approved landfill. Dispose of in accordance with all Local, State and Federal regulations at an approved waste disposal facility. Empty containers can have residues, gases and mists and are subject to proper waste disposal, as above.

## SECTION 8 PERSONAL PROTECTION

**RESPIRATORY:** Not required for normal work procedures. If misting occurs, use an appropriate respirator, a full face piece or a half mask air-purifying cartridge respirator equipped for acid gases/mists.

**HANDS:** Wear rubber gloves.

**EYES:** Wear chemical safety goggles.

**SKIN:** Wear acid resistant protective clothing with rubber boots. Wash hands and face thoroughly after handling and before eating, drinking, smoking or using the toilet.

## SECTION 9 SAFE HANDLING INFORMATION

**STORAGE/TRANSPORT:** Avoid breathing mist. Prevent contact with eyes, skin or clothing. Store solution above 7°C to prevent crystallisation. Keep container tightly closed. Keep away from direct sunlight, alkalis, sulphides, cyanides and metal powders. Store in corrosion-proof, ventilated area. Keep soda ash or lime in area for emergency use.

**PACKAGING/LABELLING:** Preferred storage containers include type 316 stainless steel, rubber-lined steel and certain reinforced plastics.

U.N. No: **1805** Class: **8** Subs Risk: **N/A** Hazchem Code: **2R**

Packing Group: **III** EPG No: **37**

Shipping Name: **PHOSPHORIC ACID**

Hazard: **CORROSIVE**

**RISK PHRASES:** **R34** Causes Burns

**SAFETY PHRASES:** **S1/2** Keep locked up and out of the reach of children.

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

**S45** In case of accident, or if unwell seek medical advice immediately.

## SECTION 10 HEALTH HAZARD ASSESMENT

**CHRONIC:** No significant health effects could be found. This material is not considered to be a carcinogen or mutagen and no reproductive effects have been identified.

**INGESTION:** Causes burns to the mouth, throat and stomach. Can cause nausea, difficulty in breathing, shock, acidosis, convulsions and collapse.

**EYE CONTACT:** Causes irritation or burns. No permanent damage is expected if treated immediately.

**SKIN CONTACT:** Causes irritation or burns, dryness and cracking. Dermatitis may occur from prolonged exposure. Injuries are more severe with hot acid.

**INHALATION:** Causes irritation to the respiratory system. Vapours and mists are corrosive to the nose, throat and mucous membranes.

## SECTION 12 FIRST AID AND TOXICITY

**INGESTION:** DO NOT induce vomiting. If conscious give a little water to drink. Obtain medical attention immediately.

**EYE CONTACT:** Immediately flush eyes with plenty of running water for at least 15 minutes. Obtain medical attention.

**SKIN CONTACT:** Immediately flush skin with plenty of running water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing thoroughly before re-use. Obtain medical attention immediately.

**INHALATION:** Remove to fresh air and remove contaminated clothing. If NOT breathing, apply artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention immediately.

**FIRST AID FACILITIES:** Ensure an eye bath and safety shower are available and ready for use. Have sufficient industrial first aid kit available. Oxygen and respirator are advised.

**ADVICE TO DOCTOR:** Treat symptomatically based on judgement of doctor and individual reactions of patient.

**TOXICITY DATA:** Oral LD50 = 1530 mg/kg (Rat)  
Dermal LD50 = 2740 mg/kg (Rabbit)  
Inhalation TClo = 100mg/m<sup>3</sup> (human)