

Remove contaminated clothing. Flush skin with copious amounts of water for at least 15 minutes. Obtain medical attention immediately.

Inhaled

Remove from exposure to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention immediately.

Advice to Doctor

Treat symptomatically based on individual reactions of patient and judgement of doctor.

Additional Information

Aggravated medical conditions caused by exposure

Product may be harmful upon repeated exposure, affects the lungs and may cause bronchitis and/or allergy.

5. FIRE FIGHTING MEASURES

Extinguishing Media

In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions. Use water to keep fire-exposed containers cool. Do NOT use large water jet into the centre of burning liquid.

Hazards from Combustion Products

Hydrogen may be formed upon contact with metals (danger of explosion)! Decomposed in high temperatures to form highly toxic Phosphorus gases.

Special protective precautions and equipment for fire fighters

Fire fighters should wear a self contained breathing apparatus and full protective clothing along with protective equipment.

Flammability Conditions

Non-combustible solid.

Additional Information

Hazchem Code : 2R

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures

Personnel involved in the clean up should wear full protective clothing. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Do not allow product to reach drains, sewers or waterways. If the product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management Authority. Use spark proof equipment.

Methods and materials for containment and clean up

Dike and salvage. Pump to clean, approved containers or soak up using absorbent material such as sand, diatomaceous earth, acid binder, etc. Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Neutralize with dilute Soda-Ash or dilute Lim. Once pick-up is complete, flush spill site with water to eliminate any residue. Hold contaminated water for treatment.

7. HANDLING AND STORAGE

Precautions for safe handling

Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Use spark proof tools and explosion proof equipment.

Conditions for safe storage, including any incompatibles

Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials. Take precautionary measures against static discharges.

Container Type

Bulk containers (stainless or PE/PP coated or lined) and bags.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards

Phosphoric Acid, Cas: 7664-38-2: TWA = 1mg/m3 STEL = 3mg/m3

Biological Limit Values

No information available on biological limits for this product.

Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Personal Protection

RESPIRATOR: For severe mist, use an approved acid gas respirator with full face piece. EYES: Chemical goggles. HANDS: Chemical resistant gloves. CLOTHING: Rubber apron and footwear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear to white solid, crystals
Formula	KH5(PO4)2 or KH2PO4.H3PO4
Odour	odourless
Vapour Pressure	Not Applicable
Vapour Density	Non-volatile
Boiling Point	N/A deg C
Melting Point	127C deg C
Solubility in water	1000g/L to 3000g/L g/l (25 deg C)
Specific Gravity	N/A (Water = 1)
Flash Point	 N/A
pH	2.2 (1% Solution)
Flammability Limits (as percentage volume in air)	
Lower Explosion Limit	Not Applicable
Upper Explosion Limit	Not Applicable
Ignition Temperature	Not Applicable
Specific Heat Value	Not Applicable
Particle Size	Not Applicable
Volatile Organic Compounds (VOC) content	Not Applicable
Evaporation Rate	Not Applicable
Viscosity	No Data
Percent Volatile	No Data
Octanol/Water partition coefficient	Not Applicable
Saturated Vapour Concentration	Not Applicable
Additional Characteristics	Not Applicable
Flame Propagation/Burning Rate of Solid Materials	Not Applicable
Properties of materials that may initiate or contribute to fire intensity	Not Applicable
Potential for Dust Explosion	Not Applicable
Reactions that Release Flammable Gases	Hydrogen may form upon contact with metals.
Fast or Intensely Burning Characteristics	Not Applicable
Non-Flammables that could contribute unusual hazards to a fire	Not Applicable
Release of invisible flammable vapours and gases	No Data
Decomposition Temperature	No Data

Additional Information

Bulk Density: 1.0-1.6 Molecular Weight: 234.1 Decomposition Temp: Changes to pyrophosphoric acid at 200°C. Hygroscopic: Average

10. STABILITY AND REACTIVITY

Chemical Stability : Product is stable under normal conditions of use and storage.

Conditions to avoid : Avoid excessive heat, dusty conditions, static discharges, moisture and high temperatures.

Incompatible Materials : Alkalines, metals, organic matters, aluminium, diazomethane, phosphorus, zinc, magnesium, acids, bases and sources of ignition.

Hazardous Decomposition Products : Poisonous phosphorous oxides (at flame temperatures).

Hazardous Reactions : Hazardous polymerization will not occur. Product may generate hydrogen (danger of explosion if hydrogen evolved in confined spaces) in contact with reactive metals, zinc, and

11. TOXICOLOGICAL INFORMATION

Toxicity Data

Oral LD50 Rat: 1530mg/Kg Skin Rabbit: 2740mg/Kg

Health Effects - Acute

Swallowed

May be fatal if swallowed.

Eye

Mist produces irritation to eyes. Liquid is corrosive to eyes.

Skin

Liquid is corrosive to the skin.

Inhaled

Mist produces irritation to the throat, lungs and nose. Product may be harmful upon repeated exposure, affects the lungs and may cause bronchitis and/or allergy.

12. ECOLOGICAL INFORMATION

Ecotoxicity : No Data

Persistence and degradability : Not biodegradable, hydrolysis in the environment.

 When released into the soil, this product may leach into groundwater.

Additional information

Environmental fate (exposure) : Prevent product from entering drains and waterways.

Bioaccumulative potential : No information available on bioaccumulation for this product.

13. DISPOSAL CONSIDERATIONS

Disposal

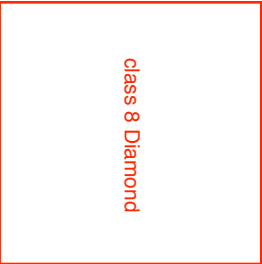
Dispose of in accordance with all local, state and federal regulations.

Special Precautions for land fill or incineration

Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

UN No.		
Shipping Name	1805	
Dangerous Goods Class		
Subsidiary Risk	PHOSPHORIC ACID	
Pack Group		
Precaution for User	8	
Hazchem Code	None Allocated	



15. REGULATORY INFORMATION

Poisons Schedule	5
EPG	37
AICS Name	PHOSPHORIC ACID
NZ Toxic Substance	3
Additional information	No Data

16. OTHER INFORMATION

Revision Date : Dec 2005

Additional information**Legend to abbreviations and acronyms:**

<	less than
>	greater than
AICS	Australian Inventory of Chemical Substances
CAS	Chemical Abstracts Service (Registry Number)
CO2	Carbon Dioxide
COD	Chemical Oxygen Demand
ERMA	Environmental Risk Management Authority
HSNO	Hazardous Substance and New Organism
IDLH	Immediately Dangerous to Life and Health
LC50	LC stands for 'lethal concentration'. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50	LD stands for "Lethal Dose". LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals
Misc	miscible
N/A	Not Applicable
NIOSH	National Institute for Occupational Safety and Health
NOHSC	National Occupational Health and Safety Commission
OECD	Organization for Economic Co-operation and Development
PEL	Permissible Exposure Limit
RCP	Reciprocal Calculation Procedure
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average
UN	United Nations (number)
cm2	square centimetres
deg C (C)	degrees Celsius
g	gram
g/cm3	grams per cubic centimetre
g/l	grams per litre
immiscible	liquids are insoluble in each other
kg	kilogram
kg/m3	kilograms per cubic metre
ltr	Litre
m3	cubic metre
mbar	millibar
mg	milligram
mg/24H	milligrams per 24 hours
mg/kg	milligrams per kilogram
mg/m3	milligrams per cubic metre

miscible liquids form one homogeneous liquid phase regardless of the amount of either component present
mm millimetre
ppb parts per billion
ppm parts per million
ppm/2h parts per million per 2 hours
ppm/6h parts per million per 6 hours
tne tonne
ug/24H micrograms per 24 hours
wt weight

Literature references:

No Data

Sources for data:

No Data

		Australia New Zealand Office	Sydney	AdelaideAuckland 2 Swettenham+61 (0)2 Road 97333000	telephone: +61 (0)2 BrisbaneChristchurch NSW 2566 97333111	Mintofacsintile: +61 (0)2 Melbourne Hawkes Bay Australia www.redox.com	Perth sydney@redox.com	Sydney
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