

MATERIAL SAFETY DATA SHEET

Product Name RECHARGE Battery Revitalizer & Conditioner
UN No. 1805 Hazchem Code: 2R

Company Name Gee & Jay Products Ltd Contact Phone: 0800 36 33 36 NZ
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SYNONYMS: Orthophosphoric Acid, Phosphoric Acid (70%)
CAS NUMBER: 7664-38-2
MOLECULAR FORMULA: H₃-PO₄
USE: Lead Acid Battery Revitalizer & Conditioner

GENERAL HAZARD STATEMENT

Highly corrosive liquid. Avoid all contact. Burns skin and eyes. Inhalation of mist produces respiratory irritation. Not combustible. Work to TLV.

PHYSICAL PROPERTIES:

Pink, odourless liquid. Soluble in water and alcohol; corrosive to ferrous metals and alloys.

Boiling Point: 213 deg. C Specific Gravity: 1.834
Melting Point: 42 deg. C Vapour pressure @ 20 deg. C 0.03mm Hg

HEALTH CONSIDERATIONS

Considered to be harmful by all exposure routes. Can kill if swallowed. Highly corrosive to skin producing severe burns which heal slowly. A severe eye irritant. Contamination of eyes can result in permanent injury due to corneal destruction. Not normally an inhalation risk due to low vapour pressure at ambient temperatures. Inhalation of mists or aerosols can produce respiratory irritation. Symptoms include coughing, choking and varying symptoms of headache, dizziness and weakness. Inhalation can lead to pulmonary oedema and cyanosis. Ingestion produces severe burning pain with vomiting and diarrhoea. As with any chemicals ingestion, inhalation of mist, prolonged or repeated skin contact should be avoided by good occupational work practice.

THRESHOLD LIMIT VALUE (TLV): 1 mg/m³

As published by the National Health and Medical Research Council.

TLV - is the time weighted average concentration of the work atmosphere for a normal 8-hour work day and a 40-hour week, to which nearly all workers can be repeatedly exposed, day after day, without adverse effect.

These TLV's are issued as guidelines for good practice. All atmospheric contamination should be kept to as low a level as is practically possible. These TLV levels should not be used as fine lines between safe and dangerous concentrations.

PERSONAL PROTECTION RECOMMENDATIONS:

Use good occupational work practices. Avoid all contact. Wear impervious gloves, full face shield or chemical goggles and overalls. Use with adequate ventilation. If generating vapour or mist and inhalation risk exists wear respirator or air-wash hood. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and protective equipment before storing or re-using.

FIRST AID:

Skin: Immediately wash contaminated skin with plenty of soap and water. Remove ALL contaminated clothing. Wash contaminated clothing before re-use. Seek immediate medical assistance.

Eyes: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash contaminated skin. Urgently seek medical assistance. Transport to hospital or medical centre.

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. For all but the most minor symptoms arrange for the patient to be seen by a doctor as soon as possible, either on site or at the nearest hospital.

Ingestion: Give plenty of water to drink. If vomiting occurs give further water to achieve effective dilution. Seek immediate medical assistance.

ADVICE TO DOCTOR: Treat symptomatically as for corrosive material.

HANDLING: Corrosive liquid. Use good occupational work practice.

REACTION: Reacts vigorously with most metals, evolving hydrogen. Exothermic reaction with strong caustic materials.

STORAGE AND TRANSPORT: UN No. 1805 (III) Classified as an 8 Dangerous Substance for the purposes of transport. The product contains a Scheduled Poison (S5) and must therefore be stored, maintained and used in accordance with relevant State Poisons Act. Refer to State Regulations for storage and transport requirements.

FIRE/EXPLOSION HAZARDS: Not combustible. Fire risk due to reaction with metals to produce hydrogen. Decomposes on heating emitting fumes of POx. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

Extinguishing media: Water spray, foam, carbon dioxide, dry chemical powder. BCF.

SPILLS: Wear full protective equipment to prevent skin and eye contamination. Contain using sand and earth. Prevent run-off into drains and waterways. Neutralise with lime or soda ash. Use absorbent (soil or sand, sawdust, inert material, vermiculite). Collect and seal in drums for disposal. Wash area down with large quantities of water.

DISPOSAL: Refer to State Land Waste Management Authority. Empty containers MUST BE decontaminated. Should be substantially diluted prior to disposal or a liquid treatment site.

TOXICITY:
Oral LD50 (rat) - 1530mg/kg
Dermal LD (rabbit) - 2740 mg/kg

Eyes: Severe irritant.
Skin: Severe irritant.

AQUATIC TOXICITY:
Tlm 96 1000-100 ppm.