

MATERIALS SAFETY DATA SHEET



INDO JORDAN CHEMICALS COMPANY LTD.

SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Manufacturer:	Indo Jordan Chemicals Company Eshidiya P.O. Box: 254, Ma'an-Jordan E-mail: gmooffice@ijcltd.com	Product name:	0-54-0 Merchant Grade Phosphoric Acid
		Common Name	Phosphoric Acid, Merchant Grade Phosphoric Acid
Emergency Phone	00962 3 2132798	Chemical Type	Phosphoric Acid

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

Synonyms:	Ortho Phosphoric Acid	LD5 (Oral - Rat) mg/kg	1530
CAS No.	7664-38-2	TLV	3 ppm
STEL	0.75 ppm	Permissible Expo sure limit	0.251 mg /m ³
Chemical Formula	H ₃ PO ₄		

SECTION 3 HAZARD IDENTIFICATION

Emergency Overview: DANGER! CORROSIVE, CAUSES SEVERE IRRITATION AND BURNS TO EVERY AREA OF CONTACT. HARMFUL IF SWALLOWED OR INHALED.

POTENTIAL HEALTH EFFECTS

Inhalation: Inhalation of mists can cause corrosive action on mucous membrane. Symptoms include burning, choking, coughing, wheezing, laryngitis, shortness of breath, headache or nausea. Move casualty to fresh air and keep at rest. Get medical attention if symptoms persist.

Ingestion: Do not induce Vomiting Cause corrosive burns of the mouth, gullet and gastrointestinal tract if swallowed. Symptoms include burning, choking, nausea, vomiting and severe pain. Was out mouth with water and give a glass of water or milk. Get medical attention immediately.

Eye Contact: Symptoms include eye burns, watering eyes. Rinse with plenty of water for a minimum of 15 minutes and seek medical attention immediately.

Skin Absorption/Contact: Symptoms include burning, itching, redness, inflammation and /or swelling of exposed tissue. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary.

Effects of overdose: Severe conjunctivitis which may result in permanent damage. Can result in nausea and vomiting with severe abdominal pain. Prolonged contact with acid mist can result in severe respiratory irritation.

SECTION 4 FIRST AID MEASURES

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waist band. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth - to - mouth resuscitation. WARNING: it may be hazardous to the person providing aid to give mouth - to - mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion: If swallowed, do not induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before re-use.

Eye Contact: Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a physician immediately.

SECTION 5 FIRE FIGHTING MEASURES

Fire: Not considered to be a fire hazard. Contact with most metals causes formulation of flammable and explosive hydrogen gas.

Explosion Hazards in Presence of Various substances Non - explosive in presence of open flames and sparks, of shocks.

Unusual fire and explosion hazards Material can react metals to produce flammable hydrogen gas. Forms flammable gases with aldehydes, cyanides mercaptans, and sulfides

Special remarks on Explosion Hazards: Mixtures with nitro methane are explosive (phosphoric acid)

Fire Fighting Media: Use any means suitable for extinguishing surrounding fire. Water spray may be used to keep fire exposed containers cool. If water is used, use abundance to control heat and acid build-up.

Special remarks on Fire Hazards: Reacts with metals to liberate flammable hydrogen gas. Formation of flammable gases with aldehydes, cyanides, mercaptans, and sulfides.

Special fire fighting procedure: Wear self - contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Environmental Precautions: Clean up personnel need personnel protection from inhalation and skin /eye contact. Evacuate and ventilate the area. Prevent spillage from entering drains. Cautiously add water to spill, taking care to avoid splashing and spattering. Neutralize diluted spill with soda ash or lime. Absorb neutralized spill with vermiculite or other inert absorbent material, then place in a suitable or prolonged exposure to the substances can produce target organ damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged contact with spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Steps to be taken incase material is released or spilled: Dike around spill for containment and recover for re-processing. Small spills can be safely neutralized with limestone or soda ash. Caustic Soda should be avoided because of excessive reactivity.

SECTION 7 HANDLING AND STORAGE

Keep in tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture, incompatibilities, and direct sunlight. Corrosive to mild steel. Store in rubber lined or 316 stainless steel designed for phosphoric Acid.

Do not wash out container and use it for other purposes. When diluting, the acid should always be added slowly to water in small amounts. Never use hot water and never add water to the acid. Water added to acid can cause uncontrolled boiling and splashing. Protect from freezing.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation Protection: General area ventilation.

Respirator Protection: Approved respirators suitable for protection against acid mists and vapors. Not required for normal work procedures, but if misting occurs and always during unloading, use a high efficiency particulate respirator or self contained breathing apparatus, with a full face shield when exposed above the TLV.

Protective Clothing: Rubber clothing, chemical gloves, footwear and chemical hood suitable for protection against acids.

Eye Protection: Tight sealing splash proof goggles.

Other: Eye wash and safety shower in work areas.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	213 deg °C (415°F)	Solubility in water:	Soluble at 30 deg °C
Freezing Point:	Data Not Available	Odour	Pleasing at 20 deg °C
Specific Gravity:	1.6 - 1.7 @20 deg °C	Vapor Pressure, mm Hg:	0.03 mm Hg at 20 °C
PH:	1	Reaction with water:	Exothermal Produces Heat
State	Liquid	Vapour density (air = 1)	3.4
Appearance:	Green or black through presence of impurities	Extinguishing Media:	Product is not flammable.
Viscosity @ 25 °C (cps):	80.0	Odorthreshold - Not available	Use appropriate media for adjacent fire. Cool containers with water, Keep away from common metals.
Solubilty	Easily Soluble in hot and water	Volatility - Not available	

SECTION 10 STABILITY AND REACTIVITY

Stability (Normal conditions):	Stable
Condition to avoid:	Avoid contact with strong alkalies or metals other than certain stainless steels.
Incompatibility (Material to Avoid)	Reacts violently with strong alkalies producing heat. Contact with metals may result in severe corrosion attack of the metal and liberation of hydrogen gas
Hazardous Decomposition Products:	High temperatures will liberate phosphorus oxide
Hazardous Polymerization:	Will not occur.

SECTION 11 TOXICOLOGY INFORMATION

Acute Oral Toxicity:	LD ₅₀ (rat) is greater than 1,530 mg/kg; not acutely toxic by oral exposure.
Acute Dermal Toxicity:	LD ₅₀ (rat) is greater than 3,160 mg/kg; not acutely toxic by dermal exposure.
Acute Inhalation Toxicity:	LC ₅₀ (guinea pig, mouse, rat, rabbit) is 61-1,689 mg/m ³ ; highly toxic by inhalation.
Chronic Effects :	May effect liver, conjunctivitis, dermatitis, pulmonary edema.
Acute Fish Toxicity:	96-hour LC ₅₀ is 3.0-3.5 mg/L (ppm), moderate toxicity to aquatic organism.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Fate:	When released into the soil, this material may leach into groundwater. When released to water, acidity may be readily reduced by natural water hardness minerals. The phosphate, however, may persist indefinitely.
Environmental Toxicity:	No information found.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal Procedures:	Collect and reprocess where possible. Following neutralization with limestone or soda ash, consult local regulations before final disposal.
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SECTION 14 TRANSPORT INFORMATION

Shipping Name:	Phosphoric Acid Solution, 8, UN 1805, P.G 111	-	-
Hazard Class:	8	C.A.S Number	7664-38-2
Labels Required:	Corrosive	D.O.T Number	UN 1805
Placard:	Corrosive	Haz Waste No.	D002
Packing Group:	III		

SECTION 15**REGULATION INFORMATION**

SECTION 16**OTHER INFORMATION****NFPA Rating:**

Health: 3

Flammability: 0

Reactivity: 0

Auto Ignition Temperature:

Not Applicable

Flammable Limits :

Lower: N/A

Upper: N/A

Reviewed by:
IJC TS/ Safety Department
01/01/21