

MATERIAL SAFETY DATA SHEET

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PRODUCTS: Glyphosate RESTORE™ **Cat. No.** 1700-0140

Section I – General

CAS #: Potassium phosphate, monobasic [7778-77-0]; phosphoric acid [7664-38-2]
FORMULA: <1% potassium phosphate, monobasic; & 2.5% phosphoric acid in water
CHEMICAL NAME: None
SYNONYMS: None
CHEMICAL FAMILY: Acidic buffer

Section II – Hazardous Ingredients

1: 2.5% phosphoric acid (1mg/m³ OSHA TWA)

Section III – Physical Data

MELTING POINT: -2°C
BOILING POINT: 100.5°C
APPEARANCE: Clear, odorless, colorless solution
SOLUBILITY: Aqueous solution

Section IV – Toxicity Data

RTECS #: TB6300000
RTECS NAME: Phosphoric acid
TOXICITY: Toxicity data are for concentrated phosphoric acid (85%); RESTORE is less than 2.5% phosphoric acid; 1530 mg/kg oral-rat LD₅₀; 2740 mg/kg skin-rabbit LD₅₀; 595 mg / 24 hrs skin-rabbit severe; 119 mg eye-rabbit severe; carcinogen status: none.
SPECIAL REGULATIONS: Not applicable
REVIEWS: Only selected Registry of Toxic Effects of Chemical Substances (RTECS) data for concentrated phosphoric acid are presented here. Refer to actual entry in RTECS for complete information.

Section V – Health Hazards and First Aid

ACUTE EFFECTS: Will irritate skin, eyes, and mucous membranes. Persons with chronic respiratory disease or skin disease may be at increased risk from exposure.
CHRONIC EFFECTS: Not established
EYE CONTACT: May cause redness, pain, blurred vision, conjunctival and corneal destruction, tearing, and increased sensitivity to light. Flush with plenty of water for 15–20 minutes; assure adequate flushing by separating eyelids with fingers. In case of chemical burns, apply sterile bandages loosely without medication. Get medical attention immediately. (Dreisbach, "Handbook of Poisoning," 11th Ed.)

- SKIN CONTACT:** May cause pain, brownish or yellowish stains on skin. Thoroughly wash exposed area with soap & water. In case of chemical burns, cover area with sterile, dry dressing. Bandage securely, but not too tightly. Get medical help.
- INHALATION:** May cause shortness of breath, pulmonary edema with frothy sputum, sore throat, coughing, choking, headache, dizziness, weakness, cyanosis, hypotension, and rapid pulse. Remove individual to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm and at rest. Get medical attention immediately.
- INGESTION:** High dosages may cause sore throat, abdominal pain, burning in mouth and pharynx followed by vomiting and diarrhea of dark precipitated blood. Immediate hypotension and brown or yellowish stains may be found around the mouth. If victim is conscious and not convulsing, give 2 to 4 glasses of water. Induce vomiting by touching finger to back of throat, then give one ounce (30 mL) of milk of magnesia. Get medical attention immediately.

Section VI – Fire and Explosion Hazards

- FLASHPOINT:** Not flammable
- EXTINGUISHING MEDIA:** Water spray
- FIREFIGHTING PROCEDURE:** Use agent suitable for type of surrounding fire. Material itself does not burn. Use flooding quantities of water as a fog and to cool all containers involved in fire. Apply water from as far a distance as possible.
- UNUSUAL HAZARDS:** Decomposes at temperatures > 300°C, forming toxic oxides of phosphorus.
- EXPLOSIVE PROPERTIES:** Not explosive

Section VII – Reactivity

- GENERAL:** Stable
- INCOMPATIBILITIES:** Incompatible with water-reactive metals, strong base, and is corrosive.
- HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:** Decomposes at temperatures > 300°C, forming toxic oxides of phosphorus. Will not polymerize.

Section VIII – Spill or Leak Procedures

- SPILL PROCEDURE:** Wear eye protection and gloves. Soak up spill with rags, paper towels, sponge, etc., and place into containers for later disposal; cover, and label "corrosive." Clean spill area with water.
- WASTE DISPOSAL:** May be sent to an EPA-approved waste disposal facility. Comply with all federal, state, and local regulations.

Section IX – Precautions for Handling and Storage

- SAFETY EQUIPMENT:** Chemical safety goggles, gloves, safety shower with eye-wash.
- HANDLING PROCEDURES:** Avoid eye and skin contact. Do not ingest. Wear safety glasses and gloves.
- STORAGE PROCEDURES:** Store at room temperature.

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