



Centre Anti-Poison pour le Québec: (800) 463-5060

Tél. (Qc): (418) 660-8666 / 800-890-8666

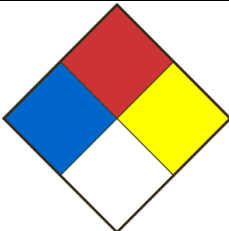
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SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier PHOSPHORUS PENTOXIDE		Product Use Laboratory use	
Chemical formula P ₂ O ₅		Product code PR-0153	Molar weight 141,95
Chemical name / Commercial name / Synonymous PHOSPHORUS PENTOXIDE, ANHYDRURE PHOSPHORIQUE, PHOSPHORIC ANHYDRIDE, OXYDE DE PHOSPHORE (V), DIPHOSPHORUS PENTOXIDE, POX			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666	CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS 8/3/2023	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Skin corrosion/irritation - Skin corrosion category 1A Serious eye damage/eye irritation - Serious eye damage category 1	
Signal Word	DANGER	
Hazards statements (H)	H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.	
Precautionary statements (P)	P260 Do not breathe dust / fume / gas / mist / vapors / spray. P264 Wash the areas of the body that have been in contact with the product after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician. P321 Specific treatment (see section 4 of the SDS and on this label). P363 Wash contaminated clothing before reuse. P405 Store locked up. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.	
PICTOGRAMS		
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)	
	Health 3 Fire 0 Reactivity 2 Special danger EAU	

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Pentoxyde de phosphore	1314-56-3	<=100

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, give water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: The product is a material corrosive. Chemical burns of the skin, eyes and respiratory and digestive mucous membranes. Nausea and vomiting. Photosensitization. Thirst. Diarrhea. Abdominal pain. Kidney damage. Liver damage. Convulsions. Hematuria (bloody urine). Oliguria (rare urination). Anuria (suppression of urine formation). Effects may be delayed. Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available. In case of poisoning, the following can be administered as an antidote: Activated charcoal. Activated charcoal may be administered if victims are conscious and alert. Use 15 to 30 g (1/2 to 1 oz) for children, 50 to 100 g (1-3/4 to 3-1/2 oz) for adults, with 125 to 250 mL (1/2 to 1 cup) of water.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Ignition conditions	Not flammable or combustible.
Suitable extinguishing media	Dry powder.
Unsuitable extinguishing media	Do not use water.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: Phosphorus oxides
Special fire and explosion hazards	Very exothermic reaction with water. Can generate enough heat to ignite combustible materials. May react violently with incompatible products (Ref Section 10).
Special protective equipment and precautions for firefighters	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnel precautions, protective equipment	Evacuate personnel to safe areas. Pick up with a shovel or broom, taking care not to scatter dust. When handling, wear appropriate safety equipment. Do NOT use absorbents composed with minerals, clay, or cellulose. Do NOT rinse with water. Ensure adequate ventilation. Avoid dust formation. Avoid breathing dust. Use a respirator as needed. Dispose of residues in a container provided for the disposal of hazardous materials. Do not let product enter drains.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Deliquescent. Store in a cool, dry place. Keep container tightly closed and store away from heat, water, moisture, and incompatible products. Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Air and moisture sensitive. Keep away from water.
Methods of handling	Bottle in the glass only. Avoid formation of dust and aerosols. Ensure good ventilation. Avoid contact with the skin, eyes and clothes. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Control parameters	Value	
Phosphorus pentoxide	1314-56-3	TLV, TWA, STEL	No data available	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TLV, TWA, STEL	No data available	Canada. British Columbia OEL
		TLV, TWA, STEL	No data available	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Ventilation	Use fan.
Respiratory	If work under the hood is not possible, or if the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid.
Appearance	poudre blanche.
Odour	Faible.
Odour threshold	Data not available
pH	1.5 à 10 g/l à 20 °C.
Melting point / Freezing point	340°C
Initial boiling point	360 (subl.)°C
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	10.0 mm @ 238°CmmHg
Vapour density	Data not available
Relative density	2.3g/cm ³
Solubility	Décomposition violente par l'eau et l'alcool.
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Material may react violently with water. May react violently with incompatible substances.
Chemical stability	Reacts with water. Hygroscopic.
Possibility of hazardous reactions	Violent reactions on contact with the following materials: water, alcohol, formic acid, calcium and calcium oxide (if heated), hydrogen fluoride, iodides, sodium carbonate, sodium oxide (if heated), sulphides.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	This product quickly absorbs moisture from the air. This product becomes deliquescent if exposed to moisture. Avoid contact with incompatible materials. Heat.
Incompatible material	Water, alcohol, formic acid, calcium and calcium oxide, hydrogen fluoride, iodides, sodium carbonate, sodium oxide, sulphides. The following strong oxidizing agents (perchloric acid, bromine pentafluoride, chlorine trifluoride, peroxides), aluminum, ammonium hydroxide, magnesium, reducing metals (potassium, sodium), moisture.
Hazardous decomposition products	Phosphorus oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

PHOSPHORUS PENTOXIDE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation and burning may cause permanent eye damage.
- Skin	Irritation and tissue burns.
- Inhalation	Spasms, irritation and inflammation of the nose, throat and lungs. Edema of the larynx and bronchi. Chemical pneumonitis and pulmonary edema that can lead to death.
Acute toxicity (Ingestion)	Irritation and burning of the mouth, throat, esophagus, stomach and abdominal wall. Dysphagia, abdominal pain, cramps, diarrhoea, melena, headache, bloody nausea and vomiting, salivation, intense thirst, tremors, convulsions, circulatory collapse, unconsciousness, coma and may lead to death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, lung damage, chest pain, cough, dyspnea, laryngitis, headache, dizziness, confusion, irritability, sweating, salivation, intense thirst, fatigue, weakness, weight loss and loss of appetite, convulsions, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Data not available; LD50 Dermal - Data not available.
CL50 (specify species and route of entry)	CL50 inhalation - Rat 1217 mg/m ³ - 1hr.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish: Static test: NOEC - Danio rerio (zebra fish) - 100 mg/L - 96 h.
Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility due to its solubility in water.
Other adverse effects	Phosphorus and / or nitrogen compounds may, depending on their concentration, contribute to the eutrophication of natural waters. Do not throw residues in the sewer.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	1807
UN Proper shipping name	ANHYDRIDE PHOSPHORIQUE
Transport hazard class(es)	8 Corrosive substances
Packing group	II
Limited quantity index	1kg
ERAP Index	1000
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Skin corrosion/irritation - Skin corrosion category 1A Serious eye damage/eye irritation - Serious eye damage category 1
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SECTION 16 - OTHER INFORMATION

Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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