



# SAFETY DATA SHEET

## SECTION 01 - IDENTIFICATION

<b>Product Identifier</b>	SODIUM PHOSPHATE DIBASIC DODECAHYDRATE
<b>Other identification (Chemical name, Commercial name, Synonymous)</b>	Disodium phosphate dodecahydrate ; Sodium phosphate dibasic dodecahydrate; Disodium hydrogen phosphate dodecahydrate; Phosphoric acid disodium salt dodecahydrate
<b>Product code</b>	SR-0949
<b>Chemical formula</b>	$\text{Na}_2\text{HPO}_4 \cdot 12\text{H}_2\text{O}$
<b>Molar weight</b>	358.14
<b>Recommended use and Restrictions on use</b>	For laboratory, school, commercial or industrial use. Not for medical or household use. Do not use for medical, food or household purposes.
<b>Supplier</b>	LABORATOIRE MAT 610, rue Adanac Québec Québec G1C 7B7 418-660-8666 Mon-Fri 8h-16h www.labmat.com labmat@labmat.com
<b>Emergency phone</b>	418-660-8666 Mon-Fri 8h-16h CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
<b>Date SDS</b>	2025-06-30

## SECTION 02 - HAZARDS IDENTIFICATION

<b>WHIMS CANADA</b>	- Not a hazardous substance according to WHMIS
<b>Hazards statements (H)</b>	- Not a dangerous substance or mixture according to the Canada WHMIS
<b>Precautionary statements (P)</b>	- The use of this product does not present any particular risk. However, standard laboratory safety precautions such as wearing gloves, clothing and eye protection should be followed.
<b>Other dangers</b>	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme) <b>Health</b> 1 <b>Fire</b> 0 <b>Reactivity</b> 0 <b>Special danger</b>

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Component	No. CAS	% Weight
Sodium phosphate dibasic dodecahydrate	10039-32-4	<=100%

## SECTION 04 - FIRST AID MEASURE

<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash skin with plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation persists, seek medical attention.
<b>Inhalation</b>	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
<b>Ingestion</b>	If the person is conscious, give water to drink. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Most important symptoms and effects (acute and delayed)</b>	Main symptoms of high exposure: Skin, eye and respiratory system irritation. Nausea and vomiting. Gastrointestinal disorders. Diarrhea. Dermatitis. Ref. section 11.
<b>Immediate medical attention and special treatment, if necessary</b>	Treat according to symptoms. Show this sheet to the attending physician.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Data not available.
<b>Combustion products</b>	Hazardous combustion products formed under fire conditions: Phosphorus oxides. Sodium oxides.
<b>Specific hazards of the dangerous product</b>	May react violently with incompatible products (Ref Section 10).
<b>Special protective equipment and precautions for firefighters</b>	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

<b>Personal precautions, protective equipment and emergency measures</b>	Evacuate personnel to safe areas. When handling, wear appropriate safety equipment (reference Section 8 for protective equipment to be used). Ensure a good ventilation. Use NIOSH cartridge respiratory protection if necessary or for larger spills. Avoid dust formation. Avoid breathing dust.
<b>Methods and materials for containment and cleaning up</b>	Pick up with a shovel or broom, taking care not to scatter dust. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Discharge into the environment must be avoided.

## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Store in a cool, dry, and well-ventilated place. Keep container tightly closed and store away from heat, water, moisture, and incompatible products (ref. section 10).
<b>Methods of handling</b>	Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. Wear personal protective equipment (ref. section 8) when handling. Always ensure good ventilation. Apply the usual standard hygiene rules: Wash your hands after use. Do not eat or drink during use.

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### WORKPLACE CONTROL PARAMETERS

Component	CAS-No.	Value
Sodium phosphate dibasic dodecahydrate	10039-32-4	No occupational exposure limits established by region-specific regulators - Quebec, Alberta, Ontario, British Columbia.

#### Respiratory

If permitted levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.

#### Gloves

Handle with protective gloves. Suggested material: Nitrile. Butyl. Neoprene. The type, thickness and length of the glove must be chosen according to the use, the concentration of the product, as well as the duration of use. Replace gloves regularly for better protection.

#### Eyes

Safety goggles with safety shutters.

#### Shoes

Use safety shoes.

#### Clothes

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

Proper ventilation or hood. 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

<b>Physical state</b>	Solid
<b>Color</b>	White
<b>Odour</b>	Data not available
<b>Odour threshold</b>	Data not available
<b>Melting point and freezing point</b>	Data not available
<b>Boiling point</b>	Data not available
<b>Flammability</b>	No
<b>Lower flammable / Explosive limit</b>	Data not available
<b>Upper flammable / Explosive limit</b>	Data not available
<b>Flash point</b>	Data not available
<b>Auto-ignition temperature</b>	Data not available
<b>Decomposition temperature</b>	Data not available
<b>pH</b>	8.9 - 9.2 à 50 g/L at 25 °C
<b>Kinematic viscosity</b>	Data not available
<b>Solubility</b>	Sol in water >100g/L
<b>Partition coefficient water/n-octanol</b>	Data not available
<b>Vapour pressure</b>	Data not available
<b>Relative density</b>	1.52g/cm <sup>3</sup>
<b>Vapour density</b>	4.90 (Air=1)
<b>Particle characteristics</b>	Powder >=40 mesh (420 µm - 1 mm)

## SECTION 10 - STABILITY AND REACTIVITY

<b>Reactivity</b>	May react violently with incompatible substances.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	May react violently with incompatible substances.
<b>Conditions to avoid</b>	Avoid moisture. Avoid contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizers. Strong acids. Strong bases. Aluminum. Zinc.
<b>Hazardous decomposition products</b>	Phosphorus oxides. Sodium oxide.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### SODIUM PHOSPHATE DIBASIC DODECAHYDRATE

<b>Routes of exposure</b>	Ingestion, inhalation, skin and eye contact.
<b>Acute exposition effects / symptoms:</b>	By exposure route below.
- Eyes	Irritation.
- Skin	Dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract.
<b>Acute toxicity (Ingestion)</b>	Nausea and vomiting. Gastrointestinal disorders. Cramps. Diarrhea. Acute absorption can lead to: Burning of the mouth, throat, esophagus and abdominal wall.
<b>Chronic exposure effects / symptoms</b>	Dermatitis.
<b>DL50 (specify species and route of entry)</b>	LD50 Oral - Rat - 2000mg/kg. LD50 Dermal - Rat - 2000mg/kg. Data based on the anhydrous product.
<b>CL50 (specify species and route of entry)</b>	LC50 Inhalation - Rat - 4 h - 830mg/m <sup>3</sup> . Data based on the anhydrous product.

## SECTION 12 - ECOLOGICAL INFORMATION

### SODIUM PHOSPHATE DIBASIC DODECAHYDRATE

<b>Ecotoxicity</b>	Data not available.
<b>Persistence and degradability</b>	Data not available.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Data not available.
<b>Other adverse effects</b>	Data not available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## SECTION 14 - TRANSPORT INFORMATION

<b>UN Number</b>	N/R
<b>UN Proper shipping name</b>	
<b>Transport hazard class(es)</b>	
<b>Packing group</b>	
<b>Limited quantity index</b>	
<b>ERAP Index</b>	-
<b>Special precautions</b>	

## SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA

- Not a hazardous substance according to WHMIS

## SECTION 16 - OTHER INFORMATION

CNESST: Commission des normes, de l'équité et de la santé et sécurité au travail

NIH: National institute of health (U.S. National Library of Medicine)

ECHA: Agence Européenne de Chimie

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

VECD: Valeur d'exposition courte durée

VEMP: Valeur d'exposition moyenne pondérée

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TLV : Threshold limit value

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

RSST: Règlement sur la santé et sécurité au travail (Québec)

INRS: l'Institut national de recherche et de sécurité pour la prévention des accidents du travail et des maladies professionnelles (France)

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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