

MATERIAL SAFETY DATA SHEET

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Section 1 - Product and Company Information

Product Name D-RIBOSE 5-PHOSPHATE DISODIUM SALT
HYDRATE
Product Number R7750
Brand SIGMA
Company Sigma-Aldrich Canada, Ltd
Address 2149 Winston Park Drive
Oakville ON L6H 6J8 CA
Technical Phone: 9058299500
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Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	Percent	SARA 313
D-RIBOSE 5-PHOSPHATE DISODIUM SALT HYDRATE	18265-46-8		Yes
Ingredient Name	CAS #	Percent	SARA 313
The hazards identified with this product are those associated with the residual solvents that are used in the manufacturing process.	None		
ETHYL ALCOHOL, NON-DENATURED, 200 PROOF	64-17-5	<= 4	No
METHANOL	67-56-1	<= 2	Yes

Formula C5H9Na2O8P · xH2O

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Toxic.
Toxic by inhalation, in contact with skin and if swallowed.
Irritating to eyes, respiratory system and skin.
Target organ(s): Eyes. Nerves.

HMIS RATING

HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0

NFPA RATING

HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

FLASH POINT

N/A

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

STORAGE

Store at -20°C

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

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GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

Appearance Physical State: Solid
Color: Faintly yellow Faintly yellow
Form: Powder Powder

Property	Value	At Temperature or Pressure
Molecular Weight	274.07 AMU	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	N/A	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
SG/Density	N/A	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Surface Tension	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point	N/A	
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	N/A	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	Solubility in Water: clear, colorless 50 mg/ml H2O clear, colorless 50 mg/ml H2O	

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Stable: Stable.
Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Phosphorous oxides Carbon monoxide, Carbon dioxide, Phosphorous oxides.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Inhalation: Material is irritating to mucous membranes and upper respiratory tract.

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Multiple Routes: Harmful if swallowed, inhaled, or absorbed through skin. Causes eye and skin irritation.

TARGET ORGAN(S) OR SYSTEM(S)

Eyes. Kidneys. Nerves. Eyes. Damage to the kidneys. Nerves. Liver. Damage to the heart. Liver. Kidneys. Damage to the eyes. Damage to the liver.

SIGNS AND SYMPTOMS OF EXPOSURE

Narcotic effect. Gastrointestinal disturbances. CNS depression. Exposure can cause: Damage to the eyes. Damage to the liver. Damage to the heart. Damage to the kidneys. May cause convulsions. May cause convulsions. Damage to the kidneys. Damage to the heart. Damage to the liver. Damage to the eyes. Narcotic effect. Gastrointestinal disturbances. CNS depression. Exposure can cause:

CONDITIONS AGGRAVATED BY EXPOSURE

The toxicological properties have not been thoroughly investigated. The toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION

S: 22-24/25
Safety Statements: Do not breathe dust. Avoid contact with skin and eyes.

US IDENTIFICATION AND LABEL TEXT

Indication of Danger: Toxic.
Risk Statements: Toxic by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.
Safety Statements: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. Do not breathe dust.

US Statements: Target organ(s): Eyes. Nerves.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: Yes
NOTES: This product is or contains a component that is subject to SARA313 reporting requirements.

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

Section 16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. 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. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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