

CG397



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SIGMA-ALDRICH

Material Safety Data Sheet

Date Printed: 05/09/2003  
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Version: 1.10

Section 1 - Product and Company Information

Product Name: D-RIBULOSE 1,5-DIPHOSPHATE SODIUM HYDRATE  
Product Number: R0878  
Brand: Sigma Chemical  
Company: Sigma-Aldrich  
Street Address: 3050 Spruce Street  
City, State, Zip, Country: SAINT LOUIS, MO 63103 US  
Technical Phone: 314 771 5765  
Fax: 800 325 5052  
Emergency Phone: 414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

Substance Name: D-RIBULOSE 1,5-DIPHOSPHATE  
SODIUMHYDRATE  
CAS #: 108321-97-7  
SARA 313 No

Formula  
Synonyms

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.  
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

Autoignition Temp: N/A

Extinguishing Media

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

Freighting

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 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.  
General Hygiene Measures: Wash thoroughly after handling. Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

Appearance: Color: White, Form: Powder  
Molecular Weight: N/A  
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  
Partition Coefficient: N/A  
Decomposition Temp.: N/A  
Flash Point °F: N/A  
Flash Point °C: N/A

Explosion Limits N/A  
Flammability N/A  
Autoignition Temp N/A  
Solubility N/A  
Solubility in Water: 50 mg/ml H<sub>2</sub>O, clear, colorless  
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.

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

**Target Organ(s) or System(s)**  
Damage to the eyes. Damage to the liver. Damage to the heart. Damage to the kidneys. Eyes. Nerves. Liver. Kidneys.

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

**Conditions Aggravated by Exposure**  
The toxicological properties have not been thoroughly investigated.

**RTECS Number:**

### 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.

### Section 14 - Transport Information

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

Sigma Chemical - R0878  
Page 3

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

### Section 15 - Regulatory Information

**EU Additional Classification**  
**Symbol of Danger:** T  
**Indication of Danger**

**Risk Statements** R: 23/24/25 36/37/38  
**Toxic by Inhalation,** in contact with skin, and if swallowed. Irritating to eyes, respiratory system, and skin.  
**Safety Statements** S: 22 26 36 45  
Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**US Classification 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). 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:** No

**Notes:** This product is subject to SARA section 313 reporting requirements.

**Canada Regulatory Information**

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

**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. 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 2003 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

Sigma Chemical - R0878  
Page 4

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