



**SIGMA-ALDRICH**

**Material Safety Data Sheet**

Date Printed: 08/31/2001  
Date Updated: 10/26/1999  
Version 1.0

**Section 1 - Product and Company Information**

|                           |                            |  |
|---------------------------|----------------------------|--|
| Product Name              | D-SORBITOL SIGMAULTRA      |  |
| Product Number            | S7547                      |  |
| Brand                     | Sigma Chemical             |  |
| Company                   | Sigma-Aldrich              |  |
| Street Address            | 3050 Spruce Street         |  |
| City, State, Zip, Country | SAINT LOUIS, MO, 63103, US |  |
| Technical Phone:          | +613147715765              | Emergency Phone: 414 273 3850 Ext.5996 |
| Fax                       | +618003255052              |  |

**Section 2 - Composition/Information on Ingredient**

|                               |  |          |
|-------------------------------|--|----------|
| Substance Name                | CAS #  | SARA 313 |
| D(-)-SORBITOL, 99% (BIOSYNTH) | 50-70-4  | No       |
| Formula                       | C6H14O6  |          |
| Synonyms                      | Cholaxine, Diakamon, D-Glucitol, Gultol, L-Gultitol, Karion, Nivitin, Sionit, Sionon, Sorbicolan, Sorbit, Sorbite, Sorbitol, D-Sorbitol, Sorbo, Sorbol, Sorbostyl, Sorviliande |          |

**Section 3 - Hazards Identification**

|              |                 |                 |               |
|--------------|-----------------|-----------------|---------------|
| HMIS Rating  | Health: 0       | Flammability: 0 | Reactivity: 1 |
| NFPA Ratings | Flammability: 0 | Reactivity: 1   |               |

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 breathing becomes difficult, call a physician.

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

**Eye Exposure**  
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**Section 5 - Fire Fighting Measures**

|                    |     |               |     |
|--------------------|-----|---------------|-----|
| 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 self-contained breathing apparatus, 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**

**Handling**

**User Exposure**

Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**Storage**

**Suitable**

Keep tightly closed. Store in a cool dry place.

**Section 8 - Exposure Controls / PPE**

**Engineering Controls**

Safety shower and eye bath. Mechanical exhaust required.

**Personal Protective Equipment**

**Respiratory**

NIOSH/MSHA-approved respirator.

**Hand**

Compatible chemical-resistant gloves.

**Eye**

Chemical safety goggles.

**General Hygiene Measures**

Wash thoroughly after handling.

**Section 9 - Physical/Chemical Properties**

**Appearance**

Color  
White

Form  
Powder

Molecular Weight: 182.17 AMU

**Property**

**Value**

**At Temperature or Pressure**

pH

5.0 - 7.0

BP/BP Range

N/A

MP/MP Range

98 - 100 °C

Freezing Point

N/A

Vapor Pressure

< 0.1 mmHg

25 °C

Vapor Density

< 1 g/l

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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  
Autoignition Temp N/A  
Optical Rotation Degree of Rotation: N/A

Solvent:H2O100 g/l

Solubility  
Solubility in Water: 1 M in H2O, 20 C, complete, colorless

## Section 10 - Stability and Reactivity

Stability  
Stable  
Stable.  
Conditions to Avoid  
Protect from moisture.  
Materials to Avoid  
Strong oxidizing agents.

Hazardous Decomposition Products  
Hazardous Decomposition Products  
Carbon monoxide, Carbon dioxide.

Hazardous Polymerization  
Hazardous Polymerization  
Will not occur.

## Section 11 - Toxicological Information

Route of Exposure  
Skin Contact  
May cause skin irritation.  
Eye Contact  
May cause eye irritation.  
Inhalation  
Material may be irritating to mucous membranes and upper respiratory tract.  
Multiple Routes  
May be harmful by inhalation, ingestion, or skin absorption.

Signs and Symptoms of Exposure  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: LZ4290000

### Toxicity Data

Oral - Rat: 15,900 mg/kg (LD50)  
Subcutaneous - Rat: 29600 MG/KG (LD50)  
Intravenous - Rat: 7100 MG/KG (LD50)

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Oral - Mouse: 17,800 mg/kg (LD50)  
Intraperitoneal - Mouse: 15 GM/KG (LD50)  
Subcutaneous - Mouse: 24 GM/KG (LD50)  
Intravenous - Mouse: 9480 MG/KG (LD50)

### Chronic Exposure - Mutagen

| Species | Dose       |
|---------|------------|
| Hamster | 300 MMOL/L |

Cell Type  
ovary

Mutation test  
Cytogenetic analysis

## Section 12 - Ecological Information

## 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.

### IATA

Proper Shipping Name: None  
Non-Hazardous for Air Transport: Non-hazardous for air transport.

## Section 15 - Regulatory Information

United States Regulatory Information  
SARA 313 Listed: No

TSCA Inventory Item: Yes

## Section 16 - Other Information

### 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 1999 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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