

## SAFETY DATA SHEET

Preparation Date: 06/03/2015

Revision date 10/18/2018

Revision Number: G2

### 1. IDENTIFICATION

**Product identifier**

**Product code:** S1791  
**Product Name:** SORBITOL, ELECTROPHORESIS GRADE

**Other means of identification**

**Synonyms:** (-)-Sorbitol  
 D-(-)-Sorbitol  
 D-1,2,3,4,5,6-Hexanehexol  
 D-Glucitol  
 D-Sorbitol  
 D-Sorbol  
 Glucitol  
 Gulitol  
 L-Gulitol  
 1,2,3,4,5,6-Hexanehexol  
 Glucitol, D-  
**CAS #:** 50-70-4  
**RTECS #** LZ4290000  
**CI#:** Not available

**Recommended use of the chemical and restrictions on use**

**Recommended use:** Stabilizer. Excipient. Plasticizer.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>

**Emergency telephone number** Chemtrec 1-800-424-9300

**Contact Person:** Tom Tyner (USA - West Coast)

**Contact Person:** Ibad Tirmiz (USA - East Coast)

### 2. HAZARDS IDENTIFICATION

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Combustible dust	-
------------------	---

**Label elements**

**Warning**

May form combustible dust concentrations in air

**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

Not available

**Precautionary Statements - Prevention**

Keep away from all ignition sources including heat, sparks, and flame

Keep container closed and grounded

Prevent dust accumulations to minimize explosion hazard

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight-%
Sorbitol	50-70-4	100

**4. FIRST AID MEASURES****First aid measures**

**General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary.

**Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

**Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**  
May cause skin irritation  
May cause eye irritation  
May cause irritation of respiratory tract  
May cause hypermotility, diarrhea

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

**Suitable Extinguishing Media:** Dry chemical. Water spray mist or foam.

**Unsuitable Extinguishing Media:** No information available.

### Specific hazards arising from the chemical

**Hazardous combustion products** Carbon Monoxide, Carbon Dioxide.

**Specific hazards** May be combustible at high temperatures. Avoid generating dust. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

### Special Protective Actions for Firefighters

**Specific Methods:** No information available

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Avoid dispersal of dust in the air. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Non-sparking tools should be used.

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading. Prevent dust cloud.

**Methods for cleaning up** Use appropriate tools to put the spilled solid in a suitable waste disposal container. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Minimize dust generation and accumulation. Avoid dust formation. Dry powders can build static electricity charges when subjected to friction of transfer and mixing operations. All equipment used when handling the product must be grounded. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep away from incompatible materials.

#### **Safe Handling Advice:**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe dust. Do not smoke. Keep away from heat and sources of ignition. Use only explosion-proof

equipment. Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Store at room temperature in the original container. Store away from incompatible materials.

**Incompatible Materials:**

Oxidizing agents

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**National occupational exposure limits**

**United States**

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Sorbitol	50-70-4	None	None	None	None

**Canada**

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Sorbitol	50-70-4	None	None	None	None

**Australia and Mexico**

Component	CAS No	Australia	Mexico
Sorbitol	50-70-4	None	None

**Appropriate engineering controls**

**Engineering measures to reduce exposure:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment). It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in the handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

**Individual protection measures, such as personal protective equipment**

**Personal Protective Equipment**

**Eye protection:** Goggles or Safety glasses with side-shields.

**Skin and body protection:** Chemical resistant apron

Long sleeved clothing  
Gloves

**Respiratory protection:** Effective dust mask. or. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Solid	<b>Appearance:</b> Powder.	<b>Color:</b> White.
<b>Odor:</b> Odorless.	<b>Taste</b> Sweet.	<b>Formula</b> C6H14O6
<b>Molecular/Formula weight (g/mole):</b> 182.17	<b>Flammability (solid, gas)</b> no data available	<b>Flashpoint (°C/°F):</b> No information available
<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> No information available	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> 98-100°C/ 208.4-212°F	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> 295°C/ 563°F	<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> No information available
<b>Specific gravity:</b> 1.489	<b>pH</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> > 0.01
<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> No information available	<b>VOC content (g/L):</b> No information available
<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> -2.20	<b>Viscosity:</b> No information available
<b>Miscibility:</b> No information available	<b>Solubility:</b> Very soluble in Acetone Easily soluble in cold water Easily soluble in hot water Soluble in Methanol Soluble in Isopropanol Soluble in Butanol Soluble in Cyclohexanol Soluble in Phenol Soluble in Acetic acid Sparingly soluble in Dimethylformamide Soluble in pyridine Soluble in acetamide solution Soluble in cold alcohol Soluble in hot alcohol Practically insoluble in most organic solvents	

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactive with oxidizing agents

### Chemical stability

**Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Avoid dust formation. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Ignition sources. Incompatible materials.

**Incompatible Materials:** Oxidizing agents

**Hazardous decomposition products:** Carbon oxides.

### Other Information

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### **Principal Routes of Exposure:**

Inhalation. Ingestion.

### Acute Toxicity

#### **Component Information**

Sorbitol

CAS No 50-70-4

**LD50/oral/rat =** 15900 mg/kg Oral LD50 Rat

**LD50/oral/mouse =** 17800 mg/kg

**LD50/dermal/rabbit =** No information available

**LD50/dermal/rat =** No information available

**LC50/inhalation/rat =** No information available

**LC50/inhalation/mouse =** No information available

**Other LD50 or LC50 information =** No information available

#### **Product Information**

**LD50/oral/rat =**

**Value - Acute Toxicity =** 15900 mg/kg

**LD50/oral/mouse =**

**Value - Acute Tox =** 17800 mg/kg

**LD50/dermal/rabbit**

Value - Acute Toxicity = No information available

**LD50/dermal/rat**

VALUE - Acute Tox = No information available

**LC50/inhalation/rat**

VALUE-Vapor = No information available

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

**LC50/Inhalation/mouse**

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

**Symptoms****Skin Contact:** May cause skin irritation.**Eye Contact:** May cause eye irritation.**Inhalation** Dust is irritating to respiratory tract.**Ingestion** May cause gastrointestinal tract irritation with nausea, vomiting, hypermotility and diarrhea.**Aspiration hazard** No information available.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Chronic Toxicity** No information available.**Sensitization:** No information available.**Mutagenic Effects:** May affect genetic material**Carcinogenic effects:** Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Sorbitol	50-70-4	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

**Reproductive toxicity** No data is available**Reproductive Effects:** No information available**Developmental Effects:** No information available**Teratogenic Effects:** No information available

### Specific Target Organ Toxicity

STOT - single exposure No information available.  
STOT - repeated exposure No information available.  
Target Organs: No information available.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Ecotoxicity effects: No data available.  
Persistence and degradability: No information available  
Bioaccumulative potential: No information available.  
Mobility in soil No information available  
Other adverse effects No information available.

## 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

**Waste from residues / unused products:**  
Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**  
Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Sorbitol	50-70-4	None	None	None	None

## 14. TRANSPORT INFORMATION

### DOT

UN-No: Not Regulated  
Proper Shipping Name: No information available  
Hazard Class No information available  
Subsidiary Class No information available  
Packing group: No information available  
Emergency Response Guide Number No information available  
Marine Pollutant No data available  
DOT RQ (lbs): No information available  
Special Provisions No Information available  
Symbol(s): No information available  
Description: No information available

### TDG (Canada)

UN-No: Not Regulated  
Proper Shipping Name: No information available  
Hazard Class No information available

Product code: S1791

Product name: SORBITOL,  
ELECTROPHORESIS GRADE

Page 8 / 11



**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Marine Pollutant Description:** No information available

**ADR**

**UN Number** Not regulated  
**Proper Shipping Name:** No information available  
**Transport hazard class(es)** No information available  
**Packing group** No information available  
**Subsidiary Risk:** No information available

**IMDG**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Marine Pollutant** No information available

**RID**

**UN Number** Not Regulated  
**Proper Shipping Name:** No information available  
**Transport hazard class(es)** No information available  
**Subsidiary Risk:** No information available  
**Packing group** No information available

**ICAO (air)**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available

**IATA**

**UN Number** Not Regulated  
**Proper Shipping Name:** No information available  
**Transport hazard class(es)** No information available  
**Subsidiary Risk:** No information available  
**Packing group** No information available  
**Precautionary Statements - Response** No information available  
**Special Provisions** No information available

<b>15. REGULATORY INFORMATION</b>
-----------------------------------

**International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
<i>Sorbitol</i>	50-70-4	Present(ACTI VE)	Present KE-31708	Present	Present (8)-50	Present	Present	Present 200-061-5

**U.S. Regulations**

*Sorbitol*

**FDA - Food Additives Generally Recognized as Safe (GRAS):** 21 CFR 182.90 21 CFR 184.1835

FDA - 21 CFR - Total Food Additives 100.130 101.80 101.9 175.300 175.320 176.180 176.210 177.1390 177.2420  
 - List Sourced from EAFUS 182.90 184.1835

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

**Chemicals Known to the State of California to Cause Cancer:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Sorbitol	50-70-4	Not Listed	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Sorbitol	50-70-4	None	None	None	None	None

**U.S. TSCA**

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Sorbitol	50-70-4	Not Applicable	Not Applicable

**Canada**

**WHMIS 2015 - GHS Classifications**

WHMIS 2015 Hazard Classification Information: The WHMIS 2015 classification of this product has not been validated or reviewed yet.

**Canada Hazardous Products Regulation** This product has not been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

**DSL/NDSL**

Component	CAS No	Canada (DSL)	Canada (NDSL)
Sorbitol	50-70-4	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Sorbitol	50-70-4	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Sorbitol	50-70-4	Not listed

**EU Classification**

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Sorbitol	50-70-4	

EU - CLP (1272/2008)

**R-phrase(s)**

not determined (not applicable)

**S -phrase(s)**

none

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Sorbitol	50-70-4		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**

None

**16. OTHER INFORMATION**

Preparation Date: 06/03/2015  
Revision date 10/18/2018  
Prepared by: Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**