

**Silver Fern Chemical, inc.**  
**SAFETY DATA SHEET**  
**SORBITOL POWDER**

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier:**

**Product name: SORBITOL POWDER**

**Chemical name:** D-Glucitol, Sorbitol  
**CAS-No.:** 50-70-4  
**EC No.:** 200-061-5

**1.2 Relevant identified uses of the substance or mixture and uses advised against:**

Identified uses:	Uses advised against:
Industrial., Food., Pharmaceuticals., Animal Feed.,	No data available.

**1.3 Details of the Distributor of the safety data sheet:**

**Distributor:**

Silver Fern Chemical, Inc.  
2226 Queen Anne Avenue North  
Seattle WA 98109, USA  
Phone: 1-866-282-3384  
Info@silverfernchemical.com

**1.4 Emergency telephone number:**

**24 Hour Emergency Contact**  
**Infotrac 1-800-535-5053 (USA & Canada)**  
**Outside USA & Canada 1-352-323-3500**

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture:**

This product is not hazardous according to OSHA 29CFR 1910.1200.

**2.2 Label elements:** Not applicable

**2.3 Other hazards:** May form explosible dust-air mixture if airborne above the Minimum Explosive Concentration.

**SECTION 3: Composition/information on ingredients**

**3.1 Substance:**

Chemical name	Concentration	CAS-No.
D-Glucitol, Sorbitol	>=99%	50-70-4

**SECTION 4: First aid measures**

**4.1 Description of first aid measures:**

**Inhalation:** Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

**Eye contact:** Flush thoroughly with water for at least 15 minutes. Get medical assistance.

<b>Skin contact:</b>	Wash with soap and water.
<b>Ingestion:</b>	Product not hazardous when ingested. Ingestion may cause: Diarrhoea. Get medical attention if any discomfort continues.
<b>4.2 Most important symptoms and effects, both acute and delayed:</b>	Ingestion may cause: Diarrhoea. Dust may irritate the eyes and the respiratory system.
<b>4.3 Indication of any immediate medical attention and special treatment needed:</b>	
<b>Treatment:</b>	Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media:

**Suitable extinguishing media:** Water spray.

**Unsuitable extinguishing media:** Dry chemicals or foams. Straight Streams of Water

### 5.2 Special hazards arising from the substance or mixture:

Fire or excessive heat may produce hazardous substances. Combustible dusts : may form an explosible mixture in the air. See Section 10.

### 5.3 Advice for firefighters:

**Special Fire Fighting Procedures:** Avoid dust cloud to prevent explosion risk. Do not use water jet as an extinguisher, as this would spread the fire.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures:

See Section 8 of the SDS for Personal Protective Equipment.

### 6.2 Environmental precautions:

Not regarded as dangerous for the environment.

### 6.3 Methods and material for containment and cleaning up:

Remove material, as much as possible, using mechanical equipment. Avoid dust cloud to prevent explosion risk. Collect and dispose of spillage as indicated in section 13 of the SDS.

### 6.4 Reference to other sections:

For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling:**

See Section 8 of the SDS for Personal Protective Equipment. See Section 5 of the SDS for prevention of combustible dust risk.

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

Preserve in well-closed original packing, preferably protected from large temperature and humidity variations, which may cause caking.

**7.3 Specific end use(s):**

Industrial., Food., Pharmaceuticals., Animal Feed.,

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters:**

**Occupational exposure limits:**

This product does not contain any components >1% with specific occupational exposure limits.

Chemical name	Type	Exposure Limit Values	Source
Dust - Inhalable particles.	TWA	10 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2019)
Dust - Respirable particles.	TWA	3 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2019)
Dust - Respirable fraction.	PEL	5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Dust - Total dust.	PEL	15 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Dust - Total dust.	TWA	15 mg/m <sup>3</sup>	US. OSHA Table Z-3 (29 CFR 1910.1000) (2016)
Dust - Respirable fraction.	TWA	5 mg/m <sup>3</sup>	US. OSHA Table Z-3 (29 CFR 1910.1000) (2016)

**8.2 Exposure controls:**

**Appropriate engineering controls:**

Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of dust.

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

**Eye/face protection:**

Wear dust-proof safety goggles where there is a risk of eyes contact.

**Skin protection:**

**Hand Protection:**

No specific precautions.

**Other:**

Wear suitable protective clothing.

**Respiratory Protection:**

In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter (type P1).

**Hygiene measures:**

Handle the product in accordance with the good hygiene practices and safety instructions.

**Environmental exposure controls:**

Not regarded as dangerous for the environment.

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties:**

**Physical State:**

solid

**Form:**

Powder

<b>Color:</b>	White
<b>Odor:</b>	Odorless
<b>pH:</b>	~ 5.7 at 50 % w/w in water
<b>Melting Point:</b>	~ 95 °C
<b>Boiling Point:</b>	Not applicable or not available
<b>Flash Point:</b>	Not applicable or not available
<b>Vapor pressure:</b>	Not Applicable
<b>Vapor density (air=1):</b>	Not Applicable
<b>Relative density:</b>	~ 0.67
<b>Solubility in Water:</b>	~ 2,300 g/l at 20 °C
<b>Partition coefficient (n-octanol/water):</b>	-2.2 - Literature Reference -
<b>Explosive properties:</b>	Data from similar product.
<b>MIT (Minimum ignition temperature):</b>	MIT <sub>c</sub> (cloud) : ~ 420 °C (EN 50281-2-1 / ASTM E1491) MIT <sub>L</sub> (5mm Layer) : ~ 400 °C (EN 50281-2-1/ ASTM E2021)

## 9.2 Other information:

**Conductivity:** ~ 0.6 µS/cm (at 50% w/w in water)

The data reported in this section does not take the place of specifications.

## SECTION 10: Stability and reactivity

- 10.1 Reactivity:** Strong oxidizing agents.
- 10.2 Chemical stability:** Material is stable under normal conditions.
- 10.3 Possibility of hazardous reactions:** No hazardous reactions under ordinary conditions of use and storage.
- 10.4 Conditions to avoid:** Avoid dust cloud to prevent explosion risk. Dust clouds may explode under certain conditions. Avoid dust close to ignition sources.
- 10.5 Incompatible materials:** Strong oxidizing substances.
- 10.6 Hazardous decomposition products:** Carbon Monoxide. Carbon Dioxide.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects:

#### Acute toxicity :

Test / Substance	Species	Type / Result	Exposure	Remarks
OECD 423 D-glucitol	Mouse	LD50 - Oral : >2000 mg/kg Not classified		- REACH data -
OECD 423 Syrups, hydrolyzed starch, hydrogenated	Rat	LD50 - Oral : > 5000 mg/kg Not classified		- REACH data - Data from similar product.
Other Guideline. D-glucitol	Rat	LD50 - Subcutaneous : 29600 mg/kg		- Literature Reference -
Other Guideline. D-glucitol	Rat	LD50 - Intravenous : 7100 mg/kg		- Literature Reference -

#### Skin irritation :

Test / Substance	Species	Result	Exposure	Remarks
OECD 439 Glucose syrups wheat hydrolysed	Human	Not Irritating	1 h	- REACH data - Data from similar product.

#### Serious eye irritation :

Test / Substance	Species	Result	Exposure	Remarks
OECD 405 Glucose syrups wheat hydrolysed	Rabbit	Not Irritating	72 h	- REACH data - Data from similar product.

#### Sensitization :

Test / Substance	Type	Species	Result	Remarks
OECD 429 Glucose syrups wheat hydrolysed	In vivo	Mouse	Non-Sensitising	- REACH data - Data from similar product.

#### Repeated dose toxicity :

Test / Substance	Species	Result	Exposure	Remarks
OECD 453 Syrups, hydrolyzed starch, hydrogenated	Rat	NOAEL : 4500 mg/kg No treatment related effects.	52 Week(s).	- REACH data - Data from similar product.

#### Mutagenesis :

Test / Substance	Type	Species	Result	Remarks
OECD 473 Syrups, hydrolyzed starch, hydrogenated	In vitro	Hamster	Negative	- REACH data - Data from similar product.
OECD 471 (Ames) Syrups, hydrolyzed starch, hydrogenated	In vitro	S. typhimurium	Negative	- REACH data - Data from similar product.
OECD 474 Syrups, hydrolyzed starch, hydrogenated	In vivo	Mouse	Negative	- REACH data - Data from similar product.

#### Carcinogenicity :

Test / Substance	Species	Route of Exposure / Exposure	Result	Remarks
OECD 451 Syrups, hydrolyzed starch, hydrogenated	Rat	Oral	No treatment related effects.	- REACH data - Data from similar product.

#### Reproductive toxicity :

Test / Substance	Species	Route of Exposure / Exposure	Result	Remarks
OECD 416 Syrups, hydrolyzed starch, hydrogenated	Rat	Oral	No treatment related effects.	- REACH data - Data from similar product.

## SECTION 12: Ecological information

### 12.1 Toxicity:

#### Acute toxicity:

Test / Substance	Species	Type/Result	Exposure	Remarks
OECD 203 D-glucitol	Oryzias latipes	LC50 : >1430 mg/l	96 h	- REACH data -
OECD 202 D-glucitol	Daphnia magna	LC50 : >1390 mg/l	48 h	- REACH data -

#### Chronic Toxicity:

No data available.

### 12.2 Persistence and degradability:

Test / Substance	Result	Remarks
OECD 301b Syrups, hydrolyzed starch, hydrogenated	> 73 % / 28 d The product is readily biodegradable.	- REACH data - Data from similar product.
OECD 301b Syrups, hydrolyzed starch, hydrogenated	> 60 % / 10 d The product is readily biodegradable.	- REACH data - Data from similar product.

### 12.3 Bioaccumulative potential:

Test / Substance	Log Pow (n-Octanol/Water Partition Coefficient)	Bioconcentration Factor (BCF) / Bioaccumulation	Remarks
D-glucitol	-2.2	~ 3	Potential to bioaccumulate is low. - Literature Reference -

### 12.4 Mobility in soil:

Test / Substance	Medium	Organic Carbon Partition Coefficient (Koc)	Remarks
D-glucitol	soil	~ 10	This material is readily biodegraded and is not likely to bioconcentrate. - Literature Reference -

### 12.5 Results of PBT and vPvB assessment:

No data available.

### 12.6 Other adverse effects:

None known.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods:

**Product:**

Dispose of waste in an appropriate authorized treatment facility in accordance with regulations in force and product characteristics at time of disposal.

**Packaging material:**

Single use packaging. Collect for salvage or disposal.

## SECTION 14: Transport information

This material is not subject to transport regulations (DOT, IMDG, IATA).

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

**US. NFPA 325 - Guide to Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids. :**

NFPA Health Rating: 0  
NFPA Flammability Rating: 1  
NFPA Instability Rating: 0  
NFPA Special Hazard: No

**US. HMIS Chemical Ratings (Hazardous Materials Information System, Chemical Ratings Guide) :**

Health hazard: 0  
Flammability hazard: 1  
Physical hazard: 0  
Personal Protection: E

**US. Toxic Substances Control Act (TSCA) :**

Listed., Active.

**US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65) :**

Not listed

**Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). :**

Listed.

**SARA Title III (Superfund Amendments and Reauthorization Act) :**

Not listed

**International Inventories :**

Australia. Inventory of Chemical Substances (AICS):	Listed.
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL):	Listed.
China. Inventory of Existing Chemical Substances (IECSC):	Listed.
EU. European Inventory of Existing Commercial Chemical Substances (EINECS):	Listed.
Japan. Inventory of Existing & New Chemical Substances (ENCS):	Listed.
Japan. Industrial Safety & Health Law (ISHL):	Listed.
Japan. Pharmacopoeia Listing:	Listed.
Korea. Existing Chemicals Inventory (KECI):	Listed.
Mexico. National Inventory of Chemical Substances (INSQ):	Listed.
New Zealand. Inventory of Chemicals (NZIoC):	Listed.
Philippines. Inventory of Chemicals and Chemical Substances (PICCS):	Listed.
Taiwan. Existing Chemicals Inventory (TCSI):	Listed.
Thailand. Existing Chemicals Inventory from FDA (TECI):	Listed.
US. Toxic Substances Control Act (TSCA):	Listed.
Vietnam. National Chemical Inventory (NCI):	Listed.

This Safety Data Sheet is in conformity with appendix D of the OSHA Hazard Communication Standard 29CFR 1910.1200.

## SECTION 16: Other information

<b>Revision Information:</b>	Not relevant.
<b>Last revised date</b>	11/19/2024
<b>Key literature references and sources for data:</b>	No data available.

### Abbreviations and acronyms used in the SDS.:

LD50: lethal dose 50%  
LC50 : lethal concentration 50%  
EC50 : The effective concentration of substance that causes 50% of the maximum response.  
CAS: Chemical Abstracts Service (division of the American Chemical Society)

### Disclaimer:

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.