

Sorbitol 70% Solution

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SECTION 1: IDENTIFICATION

1.1 GHS Product identifier:

Sorbitol 70% Solution
D-Glucitol solution; D-Sorbitol solution (aqueous)
CAS: 50-70-4

Other means of identification:

Food additive: E420(ii) (sorbitol syrup)

1.2 Recommended use of the chemical and restrictions on use:

Relevant uses: Humectant, bulking agent and sweetener in food, beverages and confectionery; excipient in pharmaceuticals, oral care and cosmetics; chemical intermediate. Industrial and professional use only.
Uses advised against: All uses not specified in this section or in section 7.3.

1.3 Supplier's details:

SURAJ CHEMICALS
No 92, Govindappa Naicken Street, Shiva Complex, Chennai – 600001, Tamil Nadu, India
Tel: +91 - 7092722822, +91 - 9840284032 / +91 - 44 - 25393652, 42130281
Email: sales@surajchemicals.com | Website: www.surajchemicals.com
GST No: 33ACEPV8190L1ZZ

1.4 Emergency phone number:

Emergency Contact No: +91 - 7092722822, +91 - 9840284032

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

GHS: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008 (CLP) / GHS criteria.

2.2 GHS label elements, including precautionary statements:

Not a hazardous substance or mixture – no hazard pictograms, signal word, hazard statements or precautionary statements are required.

2.3 Other hazards which do not result in classification:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB), at levels of 0.1% or higher.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances:

Non-applicable – this product is an aqueous mixture (see 3.2).

3.2 Mixtures:

Identification	Chemical Name / Classification	Concentration
CAS: 50-70-4	Sorbitol (D-Glucitol) – Not classified	~70% w/w (nominal)
7732-18-5	Water	~30% w/w (nominal, balance)

No components require disclosure under applicable hazard communication regulations, as the product is not classified as hazardous.

SECTION 4: FIRST AID MEASURES

4.1 Description of necessary first-aid measures:

By inhalation:

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

By skin contact:

Wash off with soap and plenty of water.

By eye contact:

Flush eyes with water as a precaution.

By ingestion:

Rinse mouth with water. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms/effects, acute and delayed:

The most important known symptoms and effects are described in section 2.2 (none, as this is not a classified hazard) and section 11.

4.3 Indication of immediate medical attention and special treatment needed, if necessary:

No data available.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media:

Suitable: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable: None known.

5.2 Specific hazards arising from the chemical:

Carbon oxides may be formed under fire conditions.

5.3 Special protective actions for fire-fighters:

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid breathing vapours, mist or gas. For personal protection see section 8.

6.2 Environmental precautions:
No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up:
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections:
For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:
Handle using standard good industrial hygiene practice; no special precautions beyond those in section 2.2 are required.

7.2 Conditions for safe storage, including any incompatibilities:
Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non-combustible liquids.

7.3 Specific end use(s):
Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:
No specific occupational exposure limit is established for sorbitol.

8.2 Appropriate engineering controls:
General industrial hygiene practice.

B. Respiratory protection:
Not normally required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges.

C. Specific protection for the hands:
Handle with gloves; inspect prior to use and dispose of contaminated gloves per applicable regulations.

D. Eye and face protection:
Eye protection tested and approved under NIOSH (US) or EN 166 (EU).

E. Bodily protection:
Impervious clothing selected according to the concentration and amount of the substance at the specific workplace.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance	
Physical state at 20°C	Liquid
Odor	No data available
Odour threshold	No data available
Product Description	
pH	~4.5 – 7.0 (typical for 70% solution; general reference)
Relative density	1.280 g/cm³
Water solubility	No data available (fully miscible – product is an aqueous solution)
Volatility / Thermal	
Melting point/freezing point	No data available
Initial boiling point/range	No data available
Evaporation rate	No data available
Vapour pressure	No data available
Vapour density	No data available
Decomposition temperature	No data available
Flammability	
Flash point	No data available
Flammability (liquid)	No data available
Upper/lower flammability or explosive limits	No data available
Auto-ignition temperature	No data available

9.2 Other information:

Partition coefficient: n-octanol/water	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:
No data available.

10.2 Chemical stability:
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions:
No data available.

10.4 Conditions to avoid:
No data available.

10.5 Incompatible materials:
Strong oxidizing agents.

10.6 Hazardous decomposition products:

Carbon oxides may be formed under fire conditions. Other decomposition products: no data available.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

A. Ingestion (acute effect):

Sorbitol has very low acute oral toxicity; published literature reports oral LD50 (rat) > 15.9 g/kg body weight [well-established public toxicological reference, not from supplier SDS]. Large amounts may have a laxative effect.

B. Inhalation / C. Skin and eye contact:

No data available.

D. CMR effects (carcinogenicity, mutagenicity, reproductive toxicity):

IARC: No component of this product present at levels ≥ 0.1% is identified as a probable, possible or confirmed human carcinogen. No data available for germ cell mutagenicity or reproductive toxicity.

E – H. Sensitisation, STOT, aspiration hazard:

No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

No data available.

12.2 Persistence and degradability:

No supplier data available; sorbitol is a naturally occurring sugar alcohol generally regarded as readily biodegradable [well-established public reference].

12.3 Bioaccumulative potential:

No data available.

12.4 Mobility in soil:

No data available (fully water-soluble).

12.5 Results of PBT and vPvB assessment:

This substance/mixture contains no components considered to be either PBT or vPvB at levels of 0.1% or higher.

12.6 Other adverse effects:

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods:

Offer surplus and non-recyclable solution to a licensed disposal company. Dispose of contaminated packaging as unused product.

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land (ADR/RID):

14.1 UN number	– (not dangerous goods)
14.2 UN proper shipping name	Not dangerous goods
14.3 Transport hazard class(es)	–
14.4 Packing group	–
14.5 Environmental hazard	No
14.6 Special precautions for user	No data available
14.7 Transport in bulk	Not relevant

Transport of dangerous goods by sea (IMDG):

14.1 UN number	–
14.2 UN proper shipping name	Not dangerous goods
14.3 Transport hazard class(es)	–
14.4 Packing group	–
14.5 Marine pollutant	No
14.6 Special precautions for user	No data available
14.7 Transport in bulk	Not relevant

Transport of dangerous goods by air (IATA):

14.1 UN number	–
14.2 UN proper shipping name	Not dangerous goods
14.3 Transport hazard class(es)	–
14.4 Packing group	–
14.5 Environmental hazard	No
14.6 Special precautions for user	No data available
14.7 Transport in bulk	Not relevant

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question:

This safety datasheet complies with the general approach of Regulation (EC) No. 1907/2006 (REACH). Sorbitol is permitted as a food additive (E420) under FSSAI (India) and Codex Alimentarius regulations, and is widely used to pharmacopoeial (IP/BP/USP) grade specifications where applicable – consult Suraj Chemicals for grade-specific documentation.

15.2 Chemical safety assessment:

A chemical safety assessment was not carried out for this product.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Annex 4 – Guidance on the preparation of Safety Data Sheets of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Texts of the legislative phrases mentioned in sections 2 and 3:

Not applicable – this product is not classified as hazardous under GHS/CLP.

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, to facilitate comprehension of this safety data sheet and the product label.

Principal bibliographical sources:

Manufacturer's Safety Data Sheet (Regulation (EC) No. 1907/2006 format); well-established public toxicological reference data for sorbitol (CAS 50-70-4), used only for the oral LD50 figure in section 11.

Abbreviations and acronyms:

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals | CLP: Classification, Labelling and Packaging Regulation | PBT: Persistent, Bioaccumulative and Toxic | vPvB: very Persistent, very Bioaccumulative | LD50: Lethal Dose 50 | IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product; it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within Suraj Chemicals' awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

END OF SAFETY DATA SHEET