Material Safety Data Sheet

DEXTROSE MONOHYDRATE

1. Product Identification
Synonyms: D-glucose, monohydrate; dextrosol; dextrose, monohydrate, powder
CAS No.: 50-99-7 (Anhydrous) 5996-10-1 (Monohydrate)
Molecular Weight: 198.18
Chemical Formula: C6H12O6.H2O

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Dextrose Anhydrous	50-99-7	90 - 100%	No

3. Hazards Identification
Emergency Overview
As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing. SAF-T-DATA(tm)
Ratings (Provided here for your convenience)
-Health Rating: 0 - None
Flammability Rating: 1 - Slight
Reactivity Rating: 1 - Slight
Contact Rating: 0 - None
Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES
Storage Color Code: Green (General Storage)
Potential Health Effects
Inhalation: Not expected to be a health hazard.
Ingestion: Extremely large oral dosages may produce gastrointestinal disturbances.
Skin Contact: No adverse effects expected.
Eye Contact: No adverse effects expected but dust may cause mechanical irritation.
Chronic Exposure: No information found.
Aggravation of Pre-existing Conditions: No information found.

4. First Aid Measures
Inhalation: Not expected to require first aid measures.
Ingestion: Not expected to require first aid measures.
Skin Contact: Not expected to require first aid measures.
Eye Contact: Wash thoroughly with running water. Get medical advice if irritation develops.

5. Fire Fighting Measures
Fire: Not considered to be a fire hazard.
Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.
Special Information: Use protective clothing and breathing equipment appropriate for the surrounding fire.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits: None established.
Ventilation System:
In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.
Personal Respirators (NIOSH Approved):
For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin Protection: Wear protective gloves and clean body-covering clothing.
Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Colorless crystals or white crystalline powder.
Odor: Odorless.
Solubility: ca. 1 g/1.1 ml water @ 25C (77F).
Specific Gravity: 1.54
pH: 5.9 For 0.5 M aqueous solution
% Volatiles by volume @ 21C (70F): 0
Boiling Point: No information found.
Melting Point: 83C (181F)
Vapor Density (Air=1): No information found.
Vapor Pressure (mm Hg): No information found.
Evaporation Rate (BuAc=1): No information found.

10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage. < 50C the Hydrated crystalline form is stable.

Hazardous Decomposition Products: Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

Incompatibilities: Reacts with sodium nitrite plus potassium nitrite, sodium peroxide plus potassium nitrate.

Conditions to Avoid: Heat, incompatibles.

11. Toxicological Information

Investigated as a tumorigen, mutagen, reproductive effector. For Dextrose (anhydrous): Oral rat LD50: 25800 mg/kg .

--------\Cancer Lists\----------

	---NTP Carcinogen---		
Ingredient	Known	Anticipated	IARC Category
Dextrose Anhydrous (50-99-7)	No	No	None

12. Ecological Information

Environmental Fate: No information found.

Environmental Toxicity: No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

--------\Chemical Inventory Status - Part 1\----------

Ingredient	TSCA	EC	Japan	Australia
Dextrose Anhydrous (50-99-7)	Yes	Yes	Yes	Yes

--------\Chemical Inventory Status - Part 2\----------

		--Canada--		
Ingredient	Korea	DSL	NDSL	Phil.
Dextrose Anhydrous (50-99-7)	Yes	Yes	No	Yes

--------\Federal, State & International Regulations - Part 1\----------

	-SARA 302-		------SARA 313------	
Ingredient	RQ	TPQ	List	Chemical Catg.
Dextrose Anhydrous (50-99-7)	No	No	No	No

--------\Federal, State & International Regulations - Part 2\----------

Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
Dextrose Anhydrous (50-99-7)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: No Chronic: No Fire: No Pressure: No
Reactivity: No (Pure / Solid)
Australian Hazchem Code: None allocated.
Poison Schedule: None allocated.
WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings:
Health: 0
Flammability: 0
Reactivity: 0
Label Hazard Warning: As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.
Label Precautions: None.
Label First Aid: Not applicable.
Product Use: Laboratory Reagent.
Revision Information: No Changes.