

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name: Dextrose, Monohydrate
CAS number: 50-99-7
Synonyms: Dextrose or Dextrose Monohydrate

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

Identified Uses : General purpose product for most food, beverage, and industrial uses.

1.3 Details of the supplier of the safety data sheet

Company : Lab Alley, LLC
22111 Highway 71 West, Suite 601
Spicewood, Texas 78669
U.S.A.
Telephone : 512-668-9918
Fax : 512-886-4008

1.4 Emergency telephone

Emergency Phone # : US & Canada: 1-800-535-5053 INFOTRAC
International 1-352-323-3500 INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Not classified as dangerous.

2.2 GHS Label elements, including precautionary statements

| | |
|-----------------------------|---|
| Pictogram: | Not classified as dangerous. |
| Signal Word: | WARNING! |
| Hazard statement(s): | May form combustible dust concentrations in air. |
| Precautionary statement(s): | Dispose of contents/container in accordance with local/regional/national/international regulations. |

Hazards not otherwise classified

None.

SECTION 3: Composition/information on ingredients

3.1 Components

| Ingredient | CAS Number | Percent | Hazardous Chemical |
|------------|------------|---------|--------------------|
| Dextrose | 50-99-7 | 100 | No |

SECTION 4: First aid measures

4.1 Description of first-aid measures

| | |
|---------------------------------|---|
| General advice: | Show this safety data sheet to the doctor in attendance. |
| If inhaled: | Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists. |
| In case of eye contact: | Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention. |
| In case of skin contact: | After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. If skin irritation occurs: Get medical advice/attention. |
| In case of ingestion: | If a large amount is swallowed, get medical attention. |

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

If in doubt, seek medical advice.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable (and unsuitable) extinguishing media

Carbon dioxide. Water spray. Foam.

5.2 Specific hazards arising from the substance or mixture

May form combustible dust concentrations in air. This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Use explosion-proof electrical equipment. Contact with combustible material may cause fire.

5.3 Special protective equipment and precautions for firefighters

Remove product from area of fire. Wet the material with water to limit dust emission or explosion. Suitable extinguishing media. Avoid inhalation of the product. Stay upwind/keep distance from source. In case of fire: Wear self-contained breathing apparatus. Wear suitable protective clothing.

5.4 Further information

None.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under section 7 and 8.

6.2 Environmental precautions

Avoid release into the environment.

6.3 Methods and materials for containment and cleaning up

Avoid generation of dust. Remove all sources of ignition. Ensure that the equipment is adequately grounded. Dispose of contents/container in accordance with local/regional/national/international regulations.

6.4 Reference to other sections

For disposal see Section 13. Refer to section 8 of SDS for personal protection details.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take care for general good hygiene and housekeeping.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

None needed according to classification criteria. Store in accordance with local/regional/national/international regulations. Store in a well-ventilated place. Keep container tightly closed. Store in a dry place. Avoid generation of dust.

SECTION 8. Exposure controls/personal protection

8.1 Occupational exposure limits

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------------|-----------|----------|------------|
| Dextrose 50-99-7 | NA | NA | NA |

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

8.2 Exposure controls

Appropriate engineering controls

Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits. 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).

Personal protective equipment

Eye/face protection

If eye contact is likely, wear chemical resistant safety goggles.

Skin and body protection

Protective clothing is not required under normal conditions. Protective gloves are not required under normal conditions.

Respiratory protection

Respiratory protection is not required under normal conditions of use. If respirable dusts are generated, respiratory protection may be needed.

Control of environmental exposure

Avoid release into the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|-----------------------------|
| Physical State | Solid. |
| Appearance | White crystalline powder. |
| Odor | No detectable foreign odor. |
| Odor Thresh | No information available. |
| pH | No information available. |
| Melting Point/Range | No information available. |
| Boiling Point/Range | No information available. |
| Flash Point | No information available. |
| Evaporation Rate | No information available. |
| Flammability (solid, gas) | No information available. |
| Flammability or explosive limit | No information available. |

Upper : NA

Lower : NA

| | |
|---|------------------------------|
| Vapor Pressure | No information available. |
| Vapor Density | No information available. |
| Density | 57 lbs/ft3 (packing density) |
| Solubility | No information available. |
| Partition coefficient; n-octanol/water | No information available. |
| Autoignition Temp | No information available. |
| Decomposition Temp | No information available. |
| Viscosity | No information available. |
| Molecular Formula | C6H12O6 |
| Molecular Weight | 180.16 |
| VOC Content(%) | No information available. |
| Oxidizing properties | No information available. |

9.2 Other safety information

Material Dust Explosivity Parameters: KSt-value (bar x m/s): 160. Maximum explosion pressure (Pmax) bar: 8.3. Maximum rate of pressure rise ((dp/dt)max) bar/s: 591. Testing in accordance with American Society of Testing Materials (ASTM E1226). This data provides a relative measure of deflagration characteristics used for design of explosion protection systems. Refer to NFPA 654, 68, and 69 for guidance on explosion mitigation.

SECTION 10: Stability and reactivity

10.1 Reactivity

No known hazardous reactions.

10.2 Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3 Possibility of hazardous reactions

There are no hazardous reactions known.

10.4 Conditions to avoid

Avoid generation of dust. Remove all sources of ignition.

10.5 Incompatible materials

Oxidizing agents. Combustible substance.

10.6 Hazardous decomposition products

Carbon dioxide and carbon monoxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product Information

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--------------------|---------------------|-------------|-----------------|
| Dextrose (50-99-7) | 25800 mg/kg (Rat) | NA | NA |

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

Irritation to eyes. Corneal opacity.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Dextrose (50-99-7)

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed

ACGIH

Not listed.

MEXICO

Not listed.

Reproductive toxicity

No information available.

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Aspiration hazard

No information available.

Chronic effects

No information available.

11.2 Additional information

None.

SECTION 12. Ecological information

12.1 Toxicity

Ecotoxicity: Avoid release into the environment.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|-----------|------------------|-----------------|------------|------------|
| Dextrose | Not listed | Not listed | Not listed | Not listed |

12.2 Persistence and Degradability

Biodegradable.

12.3 Bioaccumulative Potential

No information available.

12.4 Mobility in Soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13. Disposal considerations

13.1 Waste Disposal Methods

Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14: Transport information

DOT

UN-No Not regulated.
Proper Shipping Name
Hazard Class
Packing Group

TDG

UN-No Not regulated.
Proper Shipping Name
Hazard Class
Packing Group

IATA

UN-No Not regulated.
Proper Shipping Name
Hazard Class
Packing Group

IMDG/IMO

UN-No Not regulated.
Proper Shipping Name
Hazard Class
Packing Group

SECTION 15: Regulatory information

U.S. Federal Regulations

None of this products components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

FDA - Direct Food Additive

No components of this material are listed.

FDA - Food additives Generally Recognized as Safe(GRAS)

The following component(s) of this product are listed on the FDA - Food additives Generally Recognized as Safe(GRAS):

Dextrose (50-99-7)

FDA - Food additives Generally Recognized as Safe(GRAS) –Select Committee on GRAS Substances(SCOGS)

The following component(s) of this product are listed on the FDA - Food additives Generally Recognized as Safe(GRAS) –Select Committee on GRAS Substances(SCOGS):

Dextrose (50-99-7)

FDA - Food additives Permitted in Food on an Interim Basis

No components of this material are listed.

FDA - Substances Prohibited from use in human food

No components of this material are listed.

U.S. State Regulations

None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA

Not listed under California Proposition 65

Canada Regulations

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL.

Component Analysis - Inventory

Dextrose (50-99-7)

| US | CA | EU | AU | PH | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN | NZ | MX |
|-----|-----|-----|-----|-----|-----------|-----------|----------------|-----------|-----|-----|-----|
| Yes | DSL | EIN | Yes | Yes | Yes | No | Yes | No | Yes | Yes | Yes |

SECTION 16: Other information

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Disclaimer:

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.