

SAFETY DATA SHEET

1. Identification

Product identifier D-GLUCOSE, ANHYDROUS, REAGENT (ACS)

Other means of identification

Product code 926

Synonym(s) DEXTROSE * CORN SUGAR * GRAPE SUGAR

professional, scientific and technical activities: other professional, scientific and technical activities Recommended use

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company name GFS Chemicals, Inc. **Address** P.O. Box 245

Powell OH

43065 US

Telephone Phone 740-881-5501

Toll Free 800-858-9682 740-881-5989 Fax

Website www.gfschemicals.com E-mail service@gfschemicals.com

Emergency phone Emergency Assistance Chemtrec 800-424-9300

number

2. Hazard(s) identification

Physical hazards Not classified. **Health hazards** Not classified. Not classified. OSHA hazard(s) No hazards resulting from the material as supplied.

Label elements

Hazard symbol No symbol. Signal word Not available. **Hazard statement** Not available.

Precautionary statement

Prevention Not available. Response Not available. **Storage** Not available. **Disposal** Not available.

Hazard(s) not otherwise

classified (HNOC)

Not classified.

3. Composition/information on ingredients

Material name: D-GLUCOSE, ANHYDROUS, REAGENT (ACS)

Substances

Non-hazardous components

Chemical name	Common name and synonyms	CAS number	%
D-GLUCOSE	DEXTROSE	50-99-7	100
	CORN SUGAR		
	GRAPE SUGAR		

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a

physician if symptoms develop or persist.

Skin contact Get medical attention if irritation develops and persists.

Issue date: August-12-2013 1/6 Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Get medical advice/attention if you feel unwell.

Not available.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

None known.

Water.

Specific hazards arising from

the chemical

None known.

Special protective equipment

and precautions for

firefighters

Wear suitable protective equipment.

Fire-fighting

equipment/instructions

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. In the event of fire, cool tanks

with water spray.

Specific methods Cool containers exposed to flames with water until well after the fire is out.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Avoid inhalation of dust from the spilled material.

Methods and materials for containment and cleaning up

This product is miscible in water. Collect dust or particulates using a vacuum cleaner with a HEPA filter. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect dust using a vacuum cleaner equipped with HEPA filter. Avoid the generation of dusts during clean-up. Following product recovery, flush area with water. Small Dry Spills: With clean shovel place material into clean, dry container and cover loosely; move containers from spill

area. For waste disposal, see section 13 of the MSDS.

Environmental precautions

No special environmental precautions required.

7. Handling and storage

Precautions for safe handling

Dust can form an explosive mixture in air. Avoid dust formation. Do not breathe dust from this material. In case of insufficient ventilation, wear suitable respiratory equipment. Guard against dust accumulation of this material. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with skin and eyes. Practice good housekeeping.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Avoid dust formation, Guard against dust accumulation of this material.

8. Exposure controls/personal protection

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.

Individual protection measures, such as personal protective equipment

Eye/face protection Use tight fitting goggles if dust is generated.

Skin protection

Hand protection Not normally needed.

Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection

Wear respirator with dust filter. Use a NIOSH/MSHA approved respirator if there is a risk of

exposure to dust/fume at levels exceeding the exposure limits.

Thermal hazards Not available.

General hygiene considerations

Do not breathe dust. Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice.

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9. Physical and chemical properties

Appearance Crystalline. Powder.

Physical stateSolid.FormPowder.ColorWhite.

Odor less. or Slight.

Odor threshold Not available.

PH Not available.

Melting point/freezing point 294.8 °F (146 °C)

Tritial bailing point and Not available.

Initial boiling point and

boiling range

Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit -

upper (%)

Not available.

Explosive limit - lower

(%)

Not available.

Not available.

Explosive limit - upper

(%)

Vapor densityNot available.Relative densityNot available.Solubility(ies)SolublePartition coefficient-3.2

(n-octanol/water)

Auto-ignition temperature

Not available.

Decomposition temperature Not available. **Viscosity** Not available.

Other information

Density 1.54 g/cm3 estimated

Molecular formulaC6-H12-O6Molecular weight180.16 g/mol

Specific gravity 1.544

10. Stability and reactivity

Reactivity Oxidizing materials.

Chemical stability Material is stable under normal conditions. **Possibility of hazardous** Hazardous polymerization does not occur.

reactions
Conditions to avoid

Avoid spread of dust. High temperatures.

Incompatible materials Oxidizing agents.

Hazardous decomposition May include oxides of carbon.

products

11. Toxicological information

Information on likely routes of exposure

IngestionDue to lack of data the classification is not possible.InhalationInhalation of dusts may cause respiratory irritation.Skin contactDue to lack of data the classification is not possible.Eye contactDue to lack of data the classification is not possible.

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Symptoms related to the physical, chemical and toxicological characteristics Not available.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
D-GLUCOSE (CAS 50-99-7)		
Acute		
Other		
LD	Rabbit	35000 mg/kg
		35 g/kg

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Due to lack of data the classification is not possible.

Serious eye damage/eye

irritation

Dust in the eyes will cause irritation.

Respiratory sensitization Due to lack of data the classification is not possible. Skin sensitization Due to lack of data the classification is not possible.

Germ cell mutagenicity Mutagenic data. Due to lack of data the classification is not possible.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Reproductive toxicity Experimental reproductive effects. Due to lack of data the classification is not possible.

Specific target organ toxicity

single exposure

Due to lack of data the classification is not possible.

Specific target organ toxicity

- repeated exposure

Due to lack of data the classification is not possible.

Aspiration hazard Due to lack of data the classification is not possible.

Further information This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity No ecotoxicity data noted for the ingredient(s).

Persistence and degradability None known. **Bioaccumulative potential** Not available.

Partition coefficient n-octanol / water (log Kow)

-3.24

Mobility in soil Not available. Not available. Other adverse effects

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Not available. Hazardous waste code Not regulated.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as a dangerous good.

IMDG

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available.

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15. Regulatory information

US federal regulations CERCLA/SARA Hazardous Substances - Not applicable.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not on regulatory list.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely

hazardous substance

SARA 311/312 No

Hazardous chemical

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Not listed.

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated.

DEA Exempt Chemical Mixtures Code Number

Not regulated.

Food and Drug

Administration (FDA)

Total food additive
Direct food additive

GRAS food additive

US state regulationsCalifornia Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material

is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes

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Country(s) or region **Inventory name** On inventory (yes/no)* Europe European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS) Japan Yes Korea Existing Chemicals List (ECL) Yes New Zealand New Zealand Inventory Yes **Philippines** Philippine Inventory of Chemicals and Chemical Substances Yes (PICCS)

Toxic Substances Control Act (TSCA) Inventory

16. Other information, including date of preparation or last revision

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United States & Puerto Rico

Further information Not available.

Disclaimer The information in the sheet was written based on the best knowledge and experience currently

> available. The information given is designed only as a quidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified

Yes

in the text.

Revision Information Product and Company Identification: Synonyms

Composition / Information on Ingredients: Disclosure Overrides

Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data Regulatory Information: United States

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^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)