

# MATERIAL SAFETY DATA SHEET

# 1. Product and Company Identification

Material name Glucose Standards - all concentrations

Version # 02

 Issue date
 07-12-2013

 Revision date
 07-12-2013

 Supersedes date
 07-12-2013

 CAS #
 Mixture

Synonym(s) 1531 Glucose Standard 50 mmol/L \* 2355 Glucose Standard 200 mg/dL \* 2356 Glucose Standard

500 mg/dL \* 2367 Glucose Standard 10 mmol/L \* 2368 Glucose Standard 25 mmol/L \* 2714 Glucose Standard 100 mg/dL \* 2715 Glucose Standard 400 mg/dL \* 2716 Glucose Standard 700

mg/dL \* 2801 Glucose Standard 50 mg/dL

Manufacturer YSI, Inc.

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(Collect calls accepted)

#### 2. Hazards Identification

**Emergency overview** Health injuries are not known or expected under normal use.

Potential health effects

Routes of exposure Inhalation. Skin contact.

**Eyes** Direct contact with eyes may cause temporary irritation.

**Skin** No adverse effects due to skin contact are expected. May be slightly irritating to skin and eyes.

Inhalation No adverse effects due to inhalation are expected. High mist concentrations may cause irritation of

respiratory tract.

Ingestion Expected to be a low ingestion hazard. Ingestion of large amounts may produce gastrointestinal

disturbances including irritation, nausea, and diarrhea.

Signs and symptoms No specific hazard known. May cause transient irritation.

## 3. Composition / Information on Ingredients

Hazardous components	CAS#	Percent
Glucose	50-99-7	<1
EDTA	25102-12-9	<1
Sodium Benzoate	532-32-1	<1
Non-hazardous components	CAS#	Percent
Water	7732-18-5	>97

### 4. First Aid Measures

First aid procedures

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Ingestion** Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

**General advice** If you feel unwell, seek medical advice (show the label where possible).

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5. Fire Fighting Measures

Flammable properties Not flammable by WHMIS criteria.

Extinguishing media

Suitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

Protection of firefighters

Protective equipment for

firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting

equipment/instructions

Move containers from fire area if you can do so without risk.

**Explosion data** 

Sensitivity to static

discharge

Not available.

Sensitivity to mechanical

Not available.

impact

6. Accidental Release Measures

Personal precautions Wear appropriate protective equipment and clothing during clean-up.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

Methods for cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is

possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product

recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to

remove residual contamination.

Never return spills in original containers for re-use.

Other information Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling Observe good industrial hygiene practices. **Storage** Store away from incompatible materials.

#### 8. Exposure Controls / Personal Protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

**Engineering controls** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates

should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Eye / face protection If contact is likely, safety glasses with side shields are recommended.

Skin protection Wear suitable protective clothing. Apron and long sleeves are recommended. Boots. For

prolonged or repeated skin contact use suitable protective gloves.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

9. Physical & Chemical Properties

**Appearance** Not available. Physical state Liquid. **Form** Liquid.

Color Clear. Colorless.

Odor Odorless **Odor threshold** Not available.

6.5 - 7.5рH

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Equivalent to water Vapor pressure

Vapor density = water vapor 212 °F (100 °C) **Boiling point** Not available. Melting point/Freezing point Solubility (water) Infinitely soluble.

1 Specific gravity

Relative density Not available. Not available. Flash point Not available. Flammability limits in air,

upper, % by volume

Flammability limits in air, lower, % by volume

Not available.

**Auto-ignition temperature** 

Not available.

Other data

**Explosive properties** Not available. Flammability (solid, gas) Not applicable. **Oxidizing properties** Not available.

# 10. Chemical Stability & Reactivity Information

Chemical stability Material is stable under normal conditions. Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

## 11. Toxicological Information

**Acute effects** Expected to be a low hazard for usual industrial or commercial handling by trained personnel. Local effects

High mist concentrations may cause irritation of respiratory tract. May cause temporary irritation

on skin or eye contact.

**Chronic effects** Not expected to be hazardous by WHMIS criteria.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Reproductive effects This product is not expected to cause reproductive or developmental effects.

Symptoms and target organs No specific hazard known. May cause transient irritation. **Further information** This product has no known adverse effect on human health.

#### 12. Ecological Information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity** 

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulation / No data available.

Partition coefficient

**Accumulation** 

-3.24Glucose

Mobility in environmental No data available.

media

# 13. Disposal Considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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. Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

# 14. Transport Information

#### **TDG**

Not regulated as dangerous goods.

## **IATA**

Not regulated as dangerous goods.

#### **IMDG**

Not regulated as dangerous goods.

# 15. Regulatory Information

Country(s) or region

Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the MSDS

contains all the information required by the CPR.

**WHMIS** status Non-controlled

#### Inventory status

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)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

<sup>\*</sup>A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

Toxic Substances Control Act (TSCA) Inventory

# 16. Other Information

United States & Puerto Rico

**HMIS®** ratings Health: 0

Flammability: 0 Physical hazard: 0

Inventory name

NFPA ratings Health: 0

> Flammability: 0 Instability: 0

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

available.

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No

On inventory (yes/no)\*

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).