



Safety Data Sheet

SDS has been prepared in accordance with Regulation (EC) No. 453/2010

This Safety Data Sheet is written in reference to a sealed glass ampoule containing 10ml of the product named below.

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Substance name: Aqueous solution of dextrose

Synonyms:

D-glucose

Product type:

Liquid density standard

Date revised: Apr 2024

Previous: Jun 2022

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

Relevant identified uses: For use in the calibration of density meters.

1.3 Details of the supplier of the Safety Data Sheet

Company: H&D Fitzgerald Ltd.

Address: Cefn Du, Tremeirchion, St Asaph, Denbighshire, LL17 0US, UK

Telephone #: +44 (0)1352 720 774

Email address: admin@density.co.uk

1.4 Emergency telephone number

+44 (0)1352 720 774

Section 2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No1272/2008 [CLP]:

Not classified.

2.2 Label elements: None.

2.3 Other hazards: None.

Section 3 Composition / Information on ingredients

Substance name	C.A.S. No.	EINECS No.	Index-No. in CLP Annex IV	Classification	Concentration
water	7732-18-5	231-791-2	-	Not classified	≈ 90%
dextrose	492-62-6	207-757-8	-	Not classified	≈ 10%
Formula:	H ₂ O	C ₆ H ₁₂ O ₆			
Molecular Weight:	18.02g/mol	180.16g/mol			

Section 4 First Aid measures

4.1 Description of first aid measures

General advice:	If symptoms develop, seek medical advice. Show this safety sheet to the doctor in attendance.
Following inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Following ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Following eye contact:	Wash eyes with water or normal saline. If symptoms develop, seek medical advice.
Following skin contact:	Wash off with soap and plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2.2 and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

Section 5 Fire fighting measures

5.1 Extinguishing media

Extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon oxides.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Protective equipment: For personal protection see section 8.
Personal precautions: Avoid breathing vapours, mist or gas.
Avoid contact with eyes.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Mop up liquid and place in waste disposal container. Dispose of according to local authority regulations.

6.4 Reference to other sections

Section 8 and 13.

Section 7 Handling and storage	
7.1 Precautions for safe handling	
Handling precautions:	Avoid contact with skin and eyes. Avoid formation of aerosols.
7.2 Conditions for safe storage, including any incompatibilities	
Storage precautions:	Store ampoule in package until ready to use. Store in a cool place if possible (less than 25°C)
7.3 Specific end use	
Recommendations:	Liquid density standard for calibration of density meters.

Section 8 Exposure controls and personal protection	
8.1 Control parameters	
Components with work place control parameters	
Contains no substances with occupational exposure limit values.	
8.2 Exposure controls	
Personal protective equipment	
Eye/Face protection:	Wear safety glasses with side shields conforming to EN166.
Hand protection:	Handle with gloves conforming to EN374. Wash hands with soap and plenty of water before eating or drinking.
Other skin protection:	Use of protective clothing is good industrial practise.
Respiratory protection:	Provide sufficient air exchange and/or exhaust in work rooms.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practise. Wash hands with soap and water before breaks and at the end of the workday.
Environmental exposure controls	
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.	

Section 9 Physical and chemical properties			
9.1 Information on basic physical and chemical properties			
Appearance: Colourless, liquid	Odour: none	Odour threshold: no data available	pH: 6.6
Freezing point: -1°C	Boiling point & range: ≈103°C	Flash point: not applicable	Evaporation rate: no data available
Flammability: no data available	Upper/lower flammability or explosive limits: no data available	Vapour pressure: no data available	Vapour density: no data available
Density of liquid: ≈1040 kgm ⁻³ @ 20°C	Solubility: soluble in water	Partition coefficient: n-octanol/water no data available	Auto-ignition temperature: not applicable
Decomposition temperature: no data available	Viscosity: no data available	Explosive properties: no data available	Oxidising properties: no data available
9.2 Other information	None.		

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	No data available.
10.6 Hazardous decomposition products	If the solution is evaporated to dryness, the resulting solid will release carbon dioxide if heated to a high temperature.

Section 11 Toxicological information	
11.1 Information on toxicological effects	
11.1.1 Dextrose	
Inhalation:	No data available.
Ingestion:	LD ₅₀ Oral – rat – 25,800 mg/kg (for solid dextrose) Remarks: Behavioral: Coma, Cyanosis, Diarrhoea
Skin corrosion/irritation:	No data available.
Serious eye damage/irritation:	No data available.
Respiratory or skin sensitisation:	No data available.
Germ cell mutagenicity:	Mouse – lymphocyte Mutation in mammalian somatic cells.
Carcinogenicity:	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity:	No data available.
Specific target organ toxicity – single exposure:	No data available.
Specific target organ toxicity – repeated exposure:	No data available.
Aspiration hazard:	No data available.
Additional information:	RTECS: LZ6600000. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 Ecological information

12.1 Toxicity	
Toxicity to fish	No data available.
Toxicity to daphnia and other aquatic invertebrates:	No data available.
12.2 Persistence and degradability	
Biodegradability:	No data available.
12.3 Bioaccumulative potential	
Bioaccumulation:	No data available.
12.4 Mobility in soil	No data available.
12.5 Results of PBT and vPvB assessment	No data available.
12.6 Other adverse effects	No data available.

Section 13 Disposal considerations

13.1 Waste treatment methods	
General requirements:	Observe all national and local environmental regulations.
Product:	Offer surplus and non-recyclable solutions to a licensed disposal company or dispose of according to local authority requirements.
Contaminated packaging:	Dispose of as unused product.

Section 14 Transport information

Not classified as dangerous goods for transport.

Section 15 Regulatory information

15.1 Safety health and environmental regulations/legislation specific for the substance or mixture	This safety data sheet complies with the requirements of Regulation (EC) No. 453/2010.
15.2 Chemical safety assessment	No chemical assessment has been carried out for this substance by the supplier.

Section 16 Other information

Reason for revision:	Biennial review.
Disclaimer	H&D Fitzgerald Ltd believes that data given here is accurate. It is derived from published information about dextrose. No warranty, expressed or implied, is intended. The data is provided for your information and consideration when using aqueous dextrose as a liquid density standard for the calibration of density meters. H&D Fitzgerald Ltd assumes no legal responsibility for its use.