Fisher Scientific

Material Safety Data Sheet
Glucose Standard Solution 1% (Aq.)

MSDS# 89827

Section 1 - Chemical Product and Company Identification

MSDS Name:	Glucose Standard Solution 1% (Aq.)
Catalog Numbers:	S76789
Synonyms:	
Company Identification:	Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410
For information in the US, call:	201-796-7100
Emergency Number US:	201-796-7100
CHEMTREC Phone Number, US:	800-424-9300

Section 2 - Composition, Information on Ingredients

Risk Phrases:

CAS#:	50-99-7
Chemical Name:	Glucose
%:	1.0
EINECS#:	200-075-1
Hazard Symbols:	

Risk Phrases:

CAS#:	65-85-0
Chemical Name:	Benzoic acid
%:	<1.0
EINECS#:	200-618-2
Hazard Symbols:	

Risk Phrases:

CAS#:	7732-18-5
Chemical Name:	Water
%:	Balance
EINECS#:	231-791-2
Hazard Symbols:	

Text for R-phrases: see Section 16

Hazard Symbols:	None listed
Risk Phrases:	None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! May cause allergic respiratory reaction. May cause allergic skin reaction. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. Target Organs: None known.

Potential Health Effects

Eye:	May cause eye irritation.
Skin:	May cause skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.
Ingestion:	May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause allergic reaction.
Inhalation:	May cause respiratory tract irritation. May cause asthmatic attacks due to allergic sensitization of the respiratory tract.
Chronic:	No information found.

Section 4 - First Aid Measures

Eyes:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin:	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.
Ingestion:	If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation:	Remove from exposure and move to fresh air immediately. Get medical aid if cough or other symptoms appear.
Notes to Physician:	

Section 5 - Fire Fighting Measures

General Information:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Extinguishing Media:	Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.
Autoignition Temperature:	Not available
Flash Point:	Not available
Explosion Limits: Lower:	Not available
Explosion Limits: Upper:	Not available
NFPA Rating:	Not published

Section 6 - Accidental Release Measures

General Information:	Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

Section 7 - Handling and Storage

Handling:	Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.
Storage:	Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Glucose	none listed	none listed	none listed
Benzoic acid	none listed	none listed	none listed
Water	none listed	none listed	none listed

OSHA Vacated PELs: Glucose: None listed Benzoic acid: None listed Water: None listed

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes:	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin:	Wear appropriate protective gloves to prevent skin exposure.
Clothing:	Wear appropriate protective clothing to prevent skin exposure.
Respirators:	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: clear, colorless
Odor: odorless
pH: Not available
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 100 deg C (212.00°F)
Freezing/Melting Point: 0 deg C (32.00°F)
Decomposition Temperature: Not available
Solubility in water: Not available
Specific Gravity/Density: ~1.0
Molecular Formula:
Molecular Weight:

Section 10 - Stability and Reactivity

Chemical Stability:	Stable.
Conditions to Avoid:	Incompatible materials, strong oxidants.
Incompatibilities with Other Materials	Oxidizing agents.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide.
Hazardous Polymerization	Will not occur.

Section 11 - Toxicological Information

RTECS#:
CAS# 50-99-7: LZ6600000
CAS# 65-85-0: DG0875000
CAS# 7732-18-5: ZC0110000

LD50/LC50:
RTECS:
CAS# 50-99-7: Oral, rat: LD50 = 25800 mg/kg;
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RTECS:
CAS# 65-85-0: Draize test, rabbit, eye: 100 mg Severe;
Draize test, rabbit, skin: 500 mg/24H Mild;
Inhalation, rat: LC50 = >26 mg/m3/1H;
Oral, mouse: LD50 = 1940 mg/kg;
Oral, rat: LD50 = 1700 mg/kg;
Skin, rabbit: LD50 = >10 gm/kg;
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RTECS:
CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg;
.

Carcinogenicity:
Glucose - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Benzoic acid - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Water - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Not regulated as a hazardous material
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

USA RQ: CAS# 65-85-0: 5000 lb final RQ; 2270 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:Not available

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 50-99-7: 0

CAS# 65-85-0: 1

CAS# 7732-18-5: Not available

Canada

CAS# 50-99-7 is listed on Canada's DSL List

CAS# 65-85-0 is listed on Canada's DSL List

CAS# 7732-18-5 is listed on Canada's DSL List

Canadian WHMIS Classifications: Not available

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 50-99-7 is not listed on Canada's Ingredient Disclosure List.

CAS# 65-85-0 is listed on Canada's Ingredient Disclosure List

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 50-99-7 is listed on the TSCA Inventory.

CAS# 65-85-0 is listed on the TSCA Inventory.

CAS# 7732-18-5 is listed on the TSCA Inventory.

REVIEWED

DATE: July 11/2012

C Rutherford

Section 16 - Other Information

MSDS Creation Date: 2/09/1998

Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available

to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.