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

1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade name</td>
<td>GLUCOSE, ANHYDROUS</td>
</tr>
<tr>
<td>CAS No</td>
<td>50-99-7</td>
</tr>
<tr>
<td>Product code</td>
<td>AB00715</td>
</tr>
<tr>
<td>Formula</td>
<td>C6H12O6</td>
</tr>
</tbody>
</table>

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

Use of the substance/mixture: Laboratory use/Manufacturing component/Research

Use of the substance/mixture: Food industry: additive

1.3. Details of the supplier of the safety data sheet

AmericanBio, Inc.
15 Erie Dr.
Natick, MA 01760 - USA
T 800.443.0600 - F 508.655.2754
info@americanbio.com - www.americanbio.com

1.4. Emergency telephone number

Emergency number: 855.835.2572 (U.S.) :: 760.602.8703 (Outside U.S.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification
Not classified

2.2. Label elements

GHS-US labelling
No labelling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLUCOSE, ANHYDROUS (Main constituent)</td>
<td>(CAS No) 50-99-7</td>
<td>100</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: If you feel unwell, seek medical advice. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. Assure fresh air breathing. Allow the victim to rest.
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First-aid measures after skin contact: Rinse with water. Take victim to a doctor if irritation persists. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact: Rinse with water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion: Not applicable. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries: Unlikely to cause harmful effects. Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Unsuitable extinguishing media: No unsuitable extinguishing media known. Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture
Fire hazard: DIRECT FIRE HAZARD. No data available on direct fire hazard. INDIRECT FIRE HAZARD. No data available on indirect fire hazard.

Explosion hazard: DIRECT EXPLOSION HAZARD. Fine dust is explosive with air. INDIRECT EXPLOSION HAZARD. Dust cloud can be ignited by a spark.

Reactivity: Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters
Precautionary measures fire: Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions: No specific fire-fighting instructions required. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

Protection during firefighting: Heat/fire exposure: compressed air/oxygen apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Evacuate unnecessary personnel.


6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
For containment: Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray. Powdered form: no compressed air for pumping over spills.


6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection.

07/16/2014 EN (English) 2/6
**SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

**Precautions for safe handling:** Comply with the legal requirements. Thoroughly clean/dry the installation before use. Powdered form: no compressed air for pumping over. Avoid raising dust. Finely divided: spark- and explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Keep only in the original container in a cool, well ventilated place away from: Direct sunlight. Keep container closed when not in use.

**Incompatible products:** Strong bases. Strong acids.

**Incompatible materials:** Sources of ignition. Direct sunlight.

**Heat and ignition sources:** KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.

**Prohibitions on mixed storage:** KEEP SUBSTANCE AWAY FROM: oxidizing agents. water/moisture.

**Storage area:** Store in a dry area. Store at room temperature. Meet the legal requirements.

**Special rules on packaging:** SPECIAL REQUIREMENTS: closing. watertight. dry. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

**Packaging materials:** SUITABLE MATERIAL: plastics. cardboard.

### 7.3. Specific end use(s)

No additional information available.

**SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

No additional information available.

### 8.2. Exposure controls

**Personal protective equipment:** Avoid all unnecessary exposure.

**Materials for protective clothing:** GIVE GOOD RESISTANCE: butyl rubber. chlorosulfonated polyethylene. neoprene. viton.

**Hand protection:** Gloves. Wear protective gloves.

**Eye protection:** Safety glasses. In case of dust production: protective goggles. Chemical goggles or safety glasses.

**Skin and body protection:** Protective clothing.

**Respiratory protection:** Dust production: dust mask with filter type P1. Wear appropriate mask.

**Other information:** Do not eat, drink or smoke during use.

**SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

**Physical state:** Solid

**Appearance:** Crystalline solid. Crystalline powder.

**Molecular mass:** 180.16 g/mol

**Colour:** White to light yellow.

**Odour:** Odourless.

**Odour threshold:** No data available

**pH:** 6 (10 %)

**pH solution:** 10 %

**Relative evaporation rate (butylacetate=1):** No data available

**Melting point:** 146 °C

**Freezing point:** No data available

**Boiling point:** No data available

**Flash point:** No data available

**Self ignition temperature:** No data available

**Decomposition temperature:** No data available

**Flammability (solid, gas):** No data available

**Vapour pressure:** No data available
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Relative vapour density at 20 °C : No data available
Relative density : 1.5
Density : 1544 kg/m³
Solubility : Soluble in water.
  Water: 91 g/100ml
Log Pow : -3.24 (Experimental value)
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information
VOC content : 0 %
Other properties : Hygroscopic.

SECTION 10: Stability and reactivity
10.1. Reactivity
Upon combustion: CO and CO₂ are formed.

10.2. Chemical stability
Hygroscopic. Not established.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>GLUCOSE, ANHYDROUS (f)50-99-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified
  pH: 6 (10 %)
Serious eye damage/irritation : Not classified
  pH: 6 (10 %)
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified
Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
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**SECTION 12: Ecological information**

12.1. Toxicity
Ecology - water: Mild water pollutant (surface water). No data available on ecotoxicity.

12.2. Persistence and degradability
**GLUCOSE, ANHYDROUS (50-99-7)**
Persistence and degradability: Readily biodegradable in water. Not established.
ThOD: 1.07 g O²/g substance

12.3. Bioaccumulative potential
**GLUCOSE, ANHYDROUS (50-99-7)**
Log Pow: -3.24 (Experimental value)
Bioaccumulative potential: Bioaccumulation: not applicable. Not established.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Other information: Avoid release to the environment.

**SECTION 13: Disposal considerations**

13.1. Waste treatment methods
Waste disposal recommendations: Remove to an authorized waste treatment plant. Dispose in a safe manner in accordance with local/national regulations.

Additional information:
Ecology - waste materials: Avoid release to the environment.

**SECTION 14: Transport information**

In accordance with DOT
No dangerous good in sense of transport regulations

Additional information:
Other information: No supplementary information available.
State during transport (ADR-RID): Rail and road transport: not subject to ADR-RID.

**ADR**
Transport document description: UN N/A N/A
Packing group (ADR): N/A
Hazard identification number (Kemler No.): N/A
Classification code (ADR): N/A

**Transport by sea**
No additional information available

**Air transport**
No additional information available

**SECTION 15: Regulatory information**

15.1. US Federal regulations
**GLUCOSE, ANHYDROUS (50-99-7)**
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations
**CANADA**
No additional information available
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**EU-Regulations**
No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC
Not classified

15.2.2. National regulations
No additional information available

15.3. US State regulations
No additional information available

**SECTION 16: Other information**

Other information : None.

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SDS US (GHS HazCom 2012)

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