Product identifier		
Trade name: <u>Glycerol BI</u>) -	
Article number: 20-9700-	25	
CAS Number:		
56-81-5		
EC number:		
200-289-5		
Registration number Exe		
	f the substance or mixture and uses advised against	
No further relevant information		
Application of the substa	nce / the preparation Laboratory chemical.	
Details of the supplier of	the safety data sheet	
Manufacturer/Supplier:	·	
Severn Biotech Ltd.		
Unit 2,		
Park Lane,		
Kidderminster,		
Worcestershire.		
DY11 6TJ		
UK		
Tel: 0044 1562 825286		
Fax: 0044 1562 825284		
email: info@severnbiotech	.com	
	inable from: Product safety department.	

2 Hazards identification

· Classification of the substance or mixture

• Classification according to Regulation (EC) No 1272/2008 The substance is not classified according to the CLP regulation.

• Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Other hazards
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- \cdot Chemical characterization: Substances
- · CAS No. Description
- 56-81-5 Glycerol
- · Identification number(s)
- EC number: 200-289-5

(Contd. on page 2)

GB

Printing date 01.11.2012

Revision: 30.10.2012

Trade name: Glycerol BP

(Contd. of page 1)

4 First aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:
- Check for and remove any contact lenses.
- Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:
- Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

- · Information for doctor:
- No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.
- No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- \cdot For safety reasons unsuitable extinguishing agents: Water with full jet
- \cdot Special hazards arising from the substance or mixture
- Combustible. Gives off irritating or toxic fumes (or gases) in a fire.
- Advice for firefighters
- · Protective equipment:

Do not inhale explosion gases or combustion gases.

- Wear self-contained respiratory protective device.
- Wear fully protective suit.

6 Accidental release measures

• **Personal precautions, protective equipment and emergency procedures** Particular danger of slipping on leaked/spilled product.

Ensure adequate ventilation

- Keep ignition sources away no smoking.
- · Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Do not allow to penetrate the ground/soil.

- Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Send for recovery or disposal in suitable receptacles.
- · Reference to other sections No dangerous substances are released.

7 Handling and storage

- · Handling:
- \cdot Precautions for safe handling

Prevent formation of aerosols.

(Contd. on page 3)

Printing date 01.11.2012

Trade name: Glycerol BP

(Contd. of page 2)

- Ensure good ventilation/exhaustion at the workplace.
- · Information about fire and explosion protection: Keep ignition sources away Do not smoke.
- \cdot Conditions for safe storage, including any incompatibilities
- · Storage:
- **Requirements to be met by storerooms and receptacles:** Store in a cool location. Prevent any seepage into the ground.
- Information about storage in one common storage facility: Store away from oxidizing agents.
- Further information about storage conditions:
- Store in cool, dry conditions in well sealed receptacles.
- Protect from heat and direct sunlight.
- \cdot Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· Control parameters

· Ingredients with limit values that require monitoring at the workplace:

56-81-5 Glycerol

WEL Long-term value: 10 mg/m³

- Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- Select PPE appropriate for the operations taking place taking into account the product properties.
- · General protective and hygienic measures:
- Take note of assigned Workplace Exposure Limits.
- Do not inhale gases / fumes / aerosols.
- Wash hands before breaks and at the end of work.
- Avoid close or long term contact with the skin.
- Avoid contact with the eyes.
- Do not eat, drink, smoke or sniff while working.
- · Respiratory protection:
- Atmospheric levels should be maintained below the assigned WEL.

For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2.

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Polyethylene. Neoprene. Natural rubber ("latex"). Polyvinyl chloride ("PVC" or "vinyl"). Nitrile/ butadiene rubber ("nitrile" or "NBR"). Polyvinyl alcohol ("PVA"). Ethyl vinyl alcohol laminate ("EVAL"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 4 or higher (breakthrough time greater than 120 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to EN 374) is recommended.

⁻ GB

Printing date 01.11.2012

Trade name: Glycerol BP

(Contd. of page 3)

\cdot Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Goggles recommended during refilling

Safety glasses

Safety glasses should be consistent with EN 166 or equivalent.

· Body protection: Protective work clothing

9 Physical and chemical properties

 Information on basic physical and ch General Information 	emical properties
· Appearance:	X7'
Form:	Viscous
Colour:	Colourless
· Odour:	Pleasant
\cdot pH-value (100 g/l) at 20 $^\circ C$:	5
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	18.2 °C 290 °C
· Flash point:	199 °C
· Ignition temperature:	370 °C
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	2.7 Vol %
Upper:	19 Vol %
· Vapour pressure at 20 °C:	<0.1 hPa
· Density at 20 °C:	1.26 g/cm ³
 Solubility in / Miscibility with water: 	Fully miscible.
 Partition coefficient (n-octanol/water Other information): -1.76 log POW No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:
- No decomposition if used and stored according to specifications.

To avoid thermal decomposition do not overheat.

- Possibility of hazardous reactions No dangerous reactions known.
- \cdot Conditions to avoid No further relevant information available.
- Incompatible materials: Strong acids and oxidising agents

Acetic anhydride, isocyanates and aliphatic amines.

(Contd. on page 5)

GB ·

Printing date 01.11.2012

Revision: 30.10.2012

(Contd. of page 4)

Trade name: Glycerol BP

· Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Decomposes on heating to produce corrosive fumes of acrolein

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values relevant for classification:

Oral Dermal

LD50 >20000 mg/kg (rat) >10000 mg/kg (rabbit)

Inhalative LC50/4 h >2.75 mg/l (rat)

· Primary irritant effect:

LD50

- on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

Inhalation risk: Evaporation at 20 degs. C is negligible; a nuisance-causing concentration of airborne particles can, however, be reached quickly on spraying.

12 Ecological information

· Toxicity

· Aquatic toxicity:

EC50 >10000 mg/kg (daphnia)

· Persistence and degradability biodegradable

- · Behaviour in environmental systems:
- · Bioaccumulative potential Product is not expected to bioaccumulate.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation
- Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

(Contd. on page 6) GB

Printing date 01.11.2012

Trade name: Glycerol BP

(Contd. of page 5)

GB

· European waste catalogue

Waste key numbers in accordance with the European Waste catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

· Uncleaned packaging:

· Recommendation:

Disposal must be made according to official regulations.

Container remains hazardous when empty. Continue to observe all precuations.

• Recommended cleansing agents: Water, if necessary together with cleansing agents.

4 Transport information	
· UN-Number · ADR, ADN, IMDG, IATA	Void
 UN proper shipping name ADR, ADN, IMDG, IATA 	Void
· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA · Class	Void
· Packing group · ADR, IMDG, IATA	Void
 Environmental hazards: Marine pollutant: 	No
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	II of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-

15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS: Product safety department.

· Contact:

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)