according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: July 17, 2020

Product identifier		
Trade name: <u>Glycerine, ACS</u> Product code: GL1700 CAS Number: 56-81-5	<u>Grade</u>	
Recommended use and rest Recommended use: Laborat Restrictions on use: No relev	ory chemicals	
Details of the supplier of Manufacturer/Supplier: AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 USA Tel +1 (717)632-1291 Toll-Free: (866)632-1291 info@aquaphoenixsci.com Distributor: AquaPhoenix Scientific 860 Gitts Run Road, Hanover, PA 17331 (717) 632-1291	the Safety Data Sheet	
Emergency telephone numb ChemTel Inc. (800)255-3924 (North Americ +1 (813)248-0585 (Internation	a)	

[•] Classification of the substance or mixture

The substance is not classified as hazardous according to the Globally Harmonized System (GHS).

- [·] Label elements
- · GHS label elements Not regulated.
- · Hazard pictograms: None.
- · Signal word:
- None.
- None.
- · Hazard statements: None.
- Precautionary statements: None.

• Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

Chemical characterization: Substances CAS No. Description 56-81-5 Glycerol

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: July 17, 2020

Trade name: Glycerine, ACS Grade

(Cont'd. of page 1)

4 First-aid measures

[•] Description of first aid measures

• After inhalation: Supply fresh air; consult doctor in case of complaints.

• After skin contact:

Wash with soap and water.

If skin irritation is experienced, consult a doctor.

- After eye contact:
- Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:

Gastric or intestinal disorders when ingested.

Diarrhea.

- · **Danger:** No relevant information available.
- Indication of any immediate medical attention and special treatment needed:
- If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

• Extinguishing media

· Suitable extinguishing agents: Use fire fighting measures that suit the environment.

- · For safety reasons unsuitable extinguishing agents: No relevant information available.
- · Special hazards arising from the substance or mixture
- Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

For large spills, wear protective clothing.

• Environmental precautions No special measures required.

[•] Methods and material for containment and cleaning up

Wipe up small spills with paper towel and discard.

For larger spills, add sawdust, chalk or other inert binding material, then sweep up and discard.

Dispose of the collected material according to regulations.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: July 17, 2020

Trade name: Glycerine, ACS Grade

(Cont'd. of page 2)

7 Handling and storage

- [·] Handling
- · Precautions for safe handling: No special measures required.
- · Information about protection against explosions and fires: No special measures required.

· Conditions for safe storage, including any incompatibilities

- Requirements to be met by storerooms and receptacles: Avoid storage near extreme heat.
- Information about storage in one common storage facility:
- Store away from oxidizing agents.
- Store away from reducing agents.

· Further information about storage conditions:

- Keep containers tightly sealed.
- This product is hygroscopic.
- Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

[•] Control parameters

· Components with limit values that require monitoring at the workplace:			
56-81-5 Glycerol			
PEL (USA)	Long-term value: 15* 5** mg/m³ mist; *total dust **respirable fraction		
TLV (USA)	TLV withdrawn-insufficient data human occup. exp.		
EL (Canada)	Long-term value: 10* 3** mg/m³ *mist; **mist, respirable		
EV (Canada)	Long-term value: 10 mg/m³		
LMPE (Mexico)	Long-term value: 10 mg/m³		

• Exposure controls

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

- Engineering controls: No relevant information available.
- Breathing equipment: Not required under normal conditions of use.
- · Protection of hands: Wear protective gloves to handle contents of damaged or leaking units.
- · Material of gloves
- Nitrile rubber, NBR
- Neoprene gloves
- Natural rubber, NR
- Sensibilization by the components in the glove materials is possible.
- Not suitable are gloves made of the following materials: PVA gloves
- · Eye protection:



Safety glasses

(Cont'd. on page 4)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: July 17, 2020

(Cont'd. of page 3)

Trade name: Glycerine, ACS Grade

Follow relevant national guidelines concerning the use of protective eyewear.

· Body protection: Protection may be required for spills.

· Limitation and supervision of exposure into the environment No special requirements.

· Risk management measures No special requirements.

[·] Information on basic physical a	nd chemical properties		
Appearance: Form: Color:	Viscous Colorless		
· Odor: · Odor threshold:	Pleasant Not determined.		
[·] pH-value: · Melting point/Melting range: · Boiling point/Boiling range:	Not determined. 18.2 °C (64.8 °F) 290 °C (554 °F)		
· Flash point:	160 °C (320 °F) The product is not flammable.		
Flammability (solid, gaseous):	Not applicable.		
Auto-ignition temperature:	400 °C (752 °F)		
Decomposition temperature:	Not determined.		
Danger of explosion:	Product does not present an explosion hazard.		
Explosion limits Lower: Upper: Oxidizing properties:	Not determined. Not determined. Non-oxidizing.		
Vapor pressure at 20 °C (68 °F):	<0.1 hPa		
 Density at 20 °C (68 °F): Relative density: Vapor density: Evaporation rate: 	1.26 g/cm³ (10.51 lbs/gal) Not determined. Not determined. Not determined.		
 Solubility in / Miscibility with Water: 	Fully miscible.		
Partition coefficient (n-octanol/wate	Partition coefficient (n-octanol/water): Not determined.		
 Viscosity Dynamic: Kinematic: Other information 	Not determined. Not determined. No relevant information available.		

10 Stability and reactivity

(Cont'd. on page 5)

Safety Data Sheet according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: July 17, 2020

ade name: Glycerine, ACS Grade	
	(Cont'd. of page
• Reactivity: No relevant information available.	
• Chemical stability: Stable under normal temperatures and pressures.	
• Thermal decomposition / conditions to be avoided:	
No decomposition if used and stored according to specifications.	
Possibility of hazardous reactions	
Reacts with oxidizing agents.	
Reacts with reducing agents.	
Toxic fumes may be released if heated above the decomposition point.	
Conditions to avoid No relevant information available.	
Incompatible materials	
Oxidizing agents. Reducing agents.	
· Hazardous decomposition products	
Under fire conditions only:	
Carbon monoxide and carbon dioxide	
Toxicological information	
· Information on toxicological effects	
• Acute toxicity: Based on available data, the classification criteria are not me	t
rie die tekterigt Bacca off atalabie aata, the clacoffication official are not file	••
LD/LC50 values that are relevant for classification:	
LD/LC50 values that are relevant for classification:	
56-81-5 Glycerol	
56-81-5 Glycerol Oral LD50 12600 mg/kg (rat)	
56-81-5 Glycerol Oral LD50 12600 mg/kg (rat) • Primary irritant effect:	
56-81-5 Glycerol Oral LD50 12600 mg/kg (rat) • Primary irritant effect: • On the skin: Based on available data, the classification criteria are not met.	
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according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: July 17, 2020

Trade name: Glycerine, ACS Grade

(Cont'd. of page 5)

12 Ecological information

[·] Toxicity

· Aquatic toxicity No relevant information available.

• Persistence and degradability No relevant information available.

· **Bioaccumulative potential:** No relevant information available.

• Mobility in soil: No relevant information available.

Additional ecological information

· General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Other adverse effects No relevant information available.

13 Disposal considerations

[·] Waste treatment methods

· Recommendation:

Smaller quantities can be disposed of with household waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

[·] Uncleaned packagings

- **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information	
· UN-Number · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.
· UN proper shipping name · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.
[·] Transport hazard class(es)	
· DOT, ADR/RID/ADN, IMDG, IATA · Class	Not regulated.
 Packing group DOT, ADR/RID/ADN, IMDG, IATA 	Not regulated.
· Environmental hazards	Not applicable.
• Special precautions for user	Not applicable.
 Transport in bulk according to Annex MARPOL73/78 and the IBC Code 	II of Not applicable.

(Cont'd. on page 7)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: July 17, 2020

Trade name: Glycerine, ACS Grade

(Cont'd. of page 6)

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture
 United States (USA)
 SARA
 Section 302 (extremely hazardous substances):
 Substance is not listed.
 Section 313 (Specific toxic chemical listings):

Substance is not listed.

• TSCA (Toxic Substances Control Act)

All ingredients are listed or exempt.

· Proposition 65 (California)

· Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause developmental toxicity for females:

Substance is not listed.

· Chemicals known to cause developmental toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· EPA (Environmental Protection Agency):

Substance is not listed.

· IARC (International Agency for Research on Cancer):

Substance is not listed.

· Canadian Domestic Substances List (DSL):

Substance is not listed.

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.

 Abbreviations and acronyms: ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal concentration, 50 percent OSHA: Occupational Safety & Health Administration
 · Sources Website, European Chemicals Agency (echa.europa.eu) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do)

(Cont'd. on page 8)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: July 17, 2020

Trade name: Glycerine, ACS Grade

(Cont'd. of page 7)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.
Safety Data Sheets, Individual Manufacturers
SDS Prepared by:
ChemTel
1305 North Florida Avenue
Tampa, Florida USA 33602-2902
Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtel.com