

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Substance
Trade name : Glycerol 99% AGR, ACS
IUPAC name : glycerol
EC-No. : 200-289-5
CAS-No. : 56-81-5
REACH registration No : 01-2119471987-18
Product code : GLIO-00A
Formula : C₃H₈O₃

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Main use category : Laboratory use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

labbox labware s.l.
Migjorn, 1
P.O. Box Barcelona (SPAIN)
08338 Premia de Dalt – SPAIN
ES
T +34 937 07 79 70 - F +34 937 909 532
info@labbox.com - www.labbox.com

1.4. Emergency telephone number

Emergency number : +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number.

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

No labelling applicable

2.3. Other hazards

No additional information available

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SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%
Glycerol	CAS-No.: 56-81-5 EC-No.: 200-289-5 REACH-no: 01-2119471987-18	≥ 100

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist if irritation persists.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Drink plenty of water. If you feel unwell, seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: Cough.
Symptoms/effects after eye contact	: mild eye irritation.
Symptoms/effects after ingestion	: Ingestion may cause nausea and vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Never give anything by mouth to an unconscious person.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. ABC-powder.
Unsuitable extinguishing media	: Strong water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Combustible liquid.
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO ₂).

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers.
Protection during firefighting	: 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

General measures : Absorb spillage to prevent material damage.

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6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel).

6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Keep container tightly closed.
Storage area : Store away from heat. Store in a well-ventilated place.
Special rules on packaging : Store in a closed container. Keep only in original container.

7.3. Specific end use(s)

Laboratory chemicals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Glycerol 99% AGR, ACS (56-81-5)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	10 mg/m ³
France - Occupational Exposure Limits	
Local name	Glycérine
VME (OEL TWA)	10 mg/m ³ (aérosols)
Remark	Valeurs recommandées/admises
Spain - Occupational Exposure Limits	
Local name	Glicerina
VLA-ED (OEL TWA) [1]	10 mg/m ³ nieblas
United Kingdom - Occupational Exposure Limits	
Local name	Glycerol
WEL TWA [1]	10 mg/m ³ mist

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8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Glycerol 99% AGR, ACS (56-81-5)	
DNEL/DMEL (Workers)	
Long-term - local effects, inhalation	56 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	229 mg/kg bodyweight/day
Long-term - local effects, inhalation	33 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0,885 mg/l
PNEC aqua (marine water)	0,0885 mg/l
PNEC aqua (intermittent, freshwater)	8,85 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3,3 mg/kg dwt
PNEC sediment (marine water)	0,33 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,141 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1000 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

EN 374.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Hand protection:

protective gloves

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Other skin protection Materials for protective clothing		
Condition	Material	Standard
Good resistance:	Natural rubber, Neoprene, Viton, Butyl rubber	

8.2.2.3. Respiratory protection

No additional information available

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

The present safety data sheet is consistent with the specific conditions relied on to justify the registration of the substance as isolated intermediate.
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	: Liquid
Colour	: Colourless.
Appearance	: Liquid.
Molecular mass	: 92,09 g/mol
Odour	: odourless.
Odour threshold	: Not available
Melting point	: 18,17 °C Atm. press.: 101,3 kPa Decomposition: 'no' Sublimation: 'no'
Freezing point	: Not available
Boiling point	: 290 °C Atm. press.: 760 mm Hg
Flammability	: Not available
Explosive limits	: Not available
Lower explosion limit	: 2,7 vol %
Upper explosion limit	: 19 vol %
Flash point	: 177 °C 1013 hPa
Auto-ignition temperature	: 370 °C
Decomposition temperature	: 290 °C
pH	: Not available
Viscosity, kinematic	: 1119,746 mm ² /s
Viscosity, dynamic	: 1412 mPa·s (20 °C)
Solubility	: Soluble in water. Soluble in ethanol. Soluble in acetone. Soluble in ethylacetate. Insoluble in oils/fats. Water: 100 g/100ml 25 °C Ether: 0,2 g/100ml
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: -1,75 25 °C
Vapour pressure	: < 0,001 mm Hg (20 °C)
Vapour pressure at 50 °C	: Not available
Density	: 1261 kg/m ³ (20 °C)
Relative density	: 1,26 (20 °C)
Relative vapour density at 20 °C	: 3,17
Relative density of saturated gas/air mixture	: 1
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Specific conductivity	: 6400000 pS/m 25 °C
VOC content	: 0 %

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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Hydroscopic.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

On exposure to high temperature, may decompose, releasing corrosive gases.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Glycerol 99% AGR, ACS (56-81-5)

LD50 oral rat	27 mg/kg bodyweight Animal: rat, Animal sex: female
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Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

Glycerol 99% AGR, ACS (56-81-5)

Viscosity, kinematic	1119,746 mm ² /s
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11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

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Glycerol 99% AGR, ACS (56-81-5)

LC50 - Fish [1]	54000 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
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12.2. Persistence and degradability

Glycerol 99% AGR, ACS (56-81-5)

Persistence and degradability	Readily biodegradable.
Biochemical oxygen demand (BOD)	0,87 g O ₂ /g substance
Chemical oxygen demand (COD)	1,16 g O ₂ /g substance
ThOD	1,217 g O ₂ /g substance
BOD (% of ThOD)	0,71 % ThOD

12.3. Bioaccumulative potential

Glycerol 99% AGR, ACS (56-81-5)

Partition coefficient n-octanol/water (Log Pow)	-1,75 25 °C
Bioaccumulative potential	No bioaccumulation.

12.4. Mobility in soil

Glycerol 99% AGR, ACS (56-81-5)

Surface tension	0,0634 N/m
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Must follow special treatment according to local regulation.
European List of Waste (LoW) code	: 15 01 02 - plastic packaging 15 01 04 - metallic packaging 15 01 07 - glass packaging 16 03 06 - organic wastes other than those mentioned in 16 03 05

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR)	: Not regulated
UN-No. (IMDG)	: Not regulated
UN-No. (IATA)	: Not regulated
UN-No. (ADN)	: Not regulated

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UN-No. (RID) : Not regulated

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated
Proper Shipping Name (IMDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated
Proper Shipping Name (ADN) : Not regulated
Proper Shipping Name (RID) : Not regulated

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

ADN
Transport hazard class(es) (ADN) : Not regulated

RID
Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group (ADR) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated
Packing group (ADN) : Not regulated
Packing group (RID) : Not regulated

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

Overland transport
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated

Inland waterway transport
Not regulated

Rail transport
Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(b)	Glycerol 99% AGR, ACS

REACH Annex XIV (Authorisation List)

Glycerol 99% AGR, ACS is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

Glycerol 99% AGR, ACS is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Glycerol 99% AGR, ACS is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Glycerol 99% AGR, ACS is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Glycerol is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

VOC Directive (2004/42)

VOC content : 0 %

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to VwVwS, Annex 1 or 2; ID No. 116).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Ontwikkeling : The substance is not listed

15.2. Chemical safety assessment

No additional information available

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SECTION 16: Other information

No additional information available

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.