



Version: 9/2016
Revision date: February 2016
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1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 PRODUCT IDENTIFIER

Chemical name	1,2,3-PROPANE-TRIOL
Commercial nome	GLYCERINE 99,5% Pharma
Other identification	Glycerol
REACH registration number	The substance is exempted from registration according Annex V p.t 9 of REACH Regulation 1907/2006.
C.A.S. Registry Number	56-81-5

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE AND USES ADVISED AGAINST

Pharmaceutical industry, Cosmetic and personal care product, food and beverages products, tobacco, polyurethane product and paints

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company	AMBROGIO PAGANI S.p.a.
Adress	Via Cascinello, 9 - 24126 BERGAMO – ITALIA
Phone N°	0039-035310074
Fax N°	0039 - 035317168
Responsible department	e-mail: info@ambrogio-pagani.it

1.4 EMERGENCY TELEPHONE NUMBER

Company phone number	+39 035310074
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2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. This substance is not classified as dangerous according to Directive 67/548/EEC.

2.2 LABEL ELEMENTS

The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 OTHER HAZARDS

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 SUBSTANCES

Synonyms	1,2,3-propane-triol Glycerol, Glycerine
E.IN.E.C.S. number	200-289-5



E.I.N.E.C.S. name	1,2,3-Propane-triol
Molecular weight	92
Formula	C ₃ H ₈ O ₃
3.2 IMPURITIES, ADDITIVES	None

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

Inhalation	If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.
Skin contact	wash off with soap and plenty of water, Consult a physician
Eyes contact	rinse thoroughly with plenty of water for at least 15 min, Consult a physician.
Ingestion	Never give anything by mouth to unconscious person. Rinse mouth with water. Consult a physician

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No informations available

5. FIRE-FIGHTING MEASURES

5.1 EXTINGUISH MEDIA

Suitable extinguish media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE

Carbon oxides

5.3 ADVICE FOR FIRE-FIGHTERS

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by wearing suitable protective clothing. Suppress gas/vapours/mists with a water spray jet. Prevent fire-extinguishing water from contaminating surface water or the ground water system.

5.4 FURTHER INFORMATIONS

No informations available

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPEMENT AND EMERGENCY PROCEDURES

Advice for non-emergency personnel: do not breathe vapours/mist/gas, ensure adequate ventilation. Evacuate the danger area and observe emergency procedures.
Advice for emergency responders: Protective equipment, see section 8.

6.2 ENVIRONMENTAL PRECAUTIONS

Keep out of sewers, drains, surface and ground water

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP



Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 REFERENCES TO OTHER SECTION

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Normal precautions for non-hazardous, avoid contact with skin and eyes, avoid inhalation of vapour or mists.

7.2 CONDITIONS FOR SAFE STORAGE INCLUDING ANY INCOMPATIBILITIES

Hygroscopic product: Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 SPECIFIC END USES

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS-PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

No components with workplace control parameters

8.2 EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Individual protection measure

Eyes protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Full contact
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Body protection
working clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATIONS ON BASIC' PHYSICAL AND CHEMICAL PROPERTIES

Physical form at r.t.	Liquid
Appearance	liquid
Colour	Colourless
Odour	Odourless
Odour threshold	No data available
pH	5-8 at 100 g/l (20° C)
Melting point	18° C
Boling point	290°C (760 mmHg) - 160 °C (10 mbar)
Flash point	199°C Pensky Martens closed cup method 177° C Cleveland open cup method
Evaporation rate	No data available
Flammability	3-19%
Lower expolsion limit	2,7% (V) at 1013 hPa
Upper explosion limit	19% (V) at 1013 hPa
Vapour pressure	<0.0001 kPa at 20° C
Surface Tension (20°C)	63.4 mN/m at 20° C
Relative vapour density	3,18 – (Air = 1.0)
Density at 20°C	1,261 g/cm ³
Solubility in water	soluble
Partition Coefficient : n-octanol / water	Log Pow = -1.75
Autoignition Temperature	370°C
Decomposition temp.	ca. 200°C
Viscosity (20°C)	1412 mPa.s
Explosive Properties	No data available
Oxidizing Properties	No data available

9.2 OTHER DATA No data available

10. STABILITY AND REACTIVITY

10.1 REACTIVITY	No data available
10.2 CHEMICAL STABILITY	Stable under recommended storage conditions.
10.3 POSSIBILITY OF HAZARDOUS REACTION	No data available
10.4 CONDITIONS TO AVOID	No data available



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| 10.5 INCOMPATIBLE MATERIALS | Strong oxidizing agents, strong bases |
| 10.6 HAZARDOUS DECOMPOSITION PRODUCTS | No data available |

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Acute Toxicity	LD50/rat = 18300 mg/kg LD50 dermal – guinea pigs = 45 ml/kg
Skin corrosion/irritation	Non irritating
Serious eye damage/eye irritation	Non irritating
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	Negative
Carcinogenity	Studies in animals have shown that repeated doses produce no carcinogenic effects. This material is not listed as carcinogen by OSHA, IARC, NTP.
Reproductive toxicity	A multigeneration study in rats has shown that repeated high doses produce no adverse reproductive effects. A study in animals has shown that repeated doses produce no teratogenic effects.
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity	
Fish toxicity (LC50)	LC50, (96 hours) 54000 mg/l
Daphnia toxicity (LC50)	EC50, (24 hours) Daphnia Magna > 10000 mg/l
Algae toxicity	EC50, (8 gg) Scenedesmus > 10000 mg/l
Bacteria toxicity (EC50)	EC50, (16 hours) Pseudomonas Putida > 10000 mg/l
12.2 Persistence and degradability	readily biodegradable >98% after 24 hours BOD5 700 mgO2/l COD 1160 mg/g substance
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	No data available
12.5 Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
12.6 Other adverse effects	No data available



13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHOD

Product	Re-use/recycling of waste highly recommended. Disposal according to local and national regulations
Contaminated packaging	In accordance with local and national regulations

14. TRANSPORT INFORMATION

14.1 UN number			
ADR RID: -	IMDG: -	IATA: -	
			ADR: Not dangerous
14.2 UN proper shipping name			IMDG: Not dangerous
			IATA: Not dangerous
14.3 Transport hazard class(es)			
ADR RID: -	IMDG: -	IATA: -	
14.4 Packaging group			
ADR RID: -	IMDG: -	IATA: -	
14.5 Environmental hazards			
ADR RID: -	IMDG: -	IATA: -	
14.6 Special precautions for user			
			No data available

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATION/LEGISLATION SPECIFIC FOR THE SUBSTANCE

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Registered

EU	yes (EINECS)
USA	yes (TSCA-CSI)
Canada	yes (DSL)
Australia	yes (AICS)
Japan	yes (ENCS)
Korea	yes (ECL)
China	yes (IECSC)
Philippines	yes (PICCS)

15.2 CHEMICAL SAFETY ASSESSMENT

For this product a chemical safety assessment was not carried out

16. OTHER INFORMATIONS

Hazard phrases according to reg. 1272/2008/CE AII. III	none
R-phrases according to EC Dir. 67/548	No R-phrases



**AMBROGIO
PAGANI S.p.a.**

**MATERIAL SAFETY DATA SHEET:
GLYCERINE**

Reg. CE 1907/2006

References Glycerol IUCLID file on ECHA webpage

INCI name

Glycerine

The information provided in this Safety Data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.