

SAFETY DATA SHEET

GLYCERINE 86% AMI PH

Revision date: 14/09/2016

Selon (EC) 1907/2006

1 – IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND THE COMPANY

1.1 Product Identifier

Chemical Product: Mixture

Trade name of product: GLYCERINE 86% AMI PH

Name: « Glycerol, diluted »

REACH number: all ingredients of this product are exempted according to Regulation 987/2008/EC amending Annexes IV and V of Regulation 1907/2006/EC (REACH)

Reference number C&L : all the ingredients of this product in the scope of Regulation 1272/2008/EC (CLP), if not exempted, have been notified to the C&L inventory

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

1.2.1. Relevant identified uses

Main Use Category: Industrial Use, Professional Use

Spec. For industrial / professional use: Dispersive use

Industrial category : IC2 – Chemical Industry: basic chemical, IC3 - Chemical Industry: chemicals for synthesis, IC5 – Personal/Private Use

1.2.2. Uses not recommended

No additional information available

1.3. Details of the supplier of the Safety Data Sheet

AMI Chimie

Node Park Touraine

440 Rue Yves Chauvin

37310 TAUXIGNY

Tél : 02.47.43.06.06

Fax : 02.47.43.04.13

@ : ami@amichimie.com

1.4. Emergency telephone number

Contact AMI Chimie : +33 (0) 247430606

Opening hours: 8.30 am - 12.15 am / 1.30 pm - 5.30 pm from Monday to Thursday and 8.30 am - 12.30 am on Friday

2 - Hazards Identification

2.1. Classification of the substance or Mixture

2.1.1. Classification according to Regulation (EC) N° 1272/2008 [CLP]

Not Classified

2.1.2. Classification according directives 67/546/EEC or 1999/45/EC

Not Classified

2.1.3. Physicochemical adverse effects on human health and the environment

No additional information available

2.2. Label Element

2.2.1. Labeling according regulation (EC) N° 1272/2008 [CLP]

Labeling not applicable

2.3. Other hazards

No additional information available

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3 – COMPOSITION / INFORMATION SUR INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according directive 67/548/EEC
Glycerol	CAS : 56-81-5 / CE : 200-289-5 / REACH : 1907/2006/EC Annex V.9	86 - 88	Not classified
Aqua	CAS : 7732-18-5 / CE : 231-791-2	12 - 14	Not classified

Nom	Product identifier	%	Classification according regulation (EC) 1272/2008
Glycerol	CAS : 56-81-5 / CE : 200-289-5 / REACH : 1907/2006/EC Annex V.9	86 - 88	Not classified
Aqua	CAS : 7732-18-5 / CE : 231-791-2	12 - 14	Not classified

4 – First-Aid Measures

4.1. Description of first aid measures

First Aid - general : watch the vital functions. Unconscious victim: maintain free airways. Respiratory arrest: Artificial respiration oxygen. Cardiac arrest: reanimate the victim. Conscious victim with respiratory disorders: semi-sitting position. Shock: preferably on the back, Slightly raised legs. Vomiting: prevent asphyxia/respiratory pneumonia. Prevent cooling by covering the victim (do not warm). Watch the victim continuously. Provide psychological help. Maintain the quiet victim, avoid him any effort. According to the health: doctor/hospital.

First aid after inhalation : Take the victim to fresh air. Respiratory disorders: consult doctor/medical service. First aid after contact with the skin: wash immediately with plenty of water. Soap may be used. If irritation persists, consult a doctor.

First aid after eye contact : wash immediately with plenty of water. Do not use neutralizing product. If irritation persists, consult an ophthalmologist.

First aid after ingestion : wash immediately with plenty of water. After ingestion: drink a lot of water. Consult poison control center. Consult a doctor/a medical service in case of discomfort. Large doses ingestion : hospitalization immediate.

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

Symptoms/injury after inhalation : IN CASE OF BURNING : respiratory tract irritation. Nasal mucosa irritation.

Symptoms/injury after eye contact : eye redness. non-irritating.

Symptoms/injury after ingestion : Nausea, vomiting, diarrhoea. AFTER INGESTION IN LARGE QUANTITY : headaches, dehydration, arrhythmic disorders, change of blood level/blood composition, diminution of renal function.

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

No additional information available.

5 – FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Appropriate extinguishing media : Foams AFFF. Powder ABC. Carbonic Acid. Dry sand. Powder. Adapt extinguishing agents at the environment.

Inappropriate extinguishing agents : Water is inefficient for the extinction.

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5.2. Special hazards arising from the substance or mixture

Fire hazard: DANGER OF DIRECT FIRE: Combustible. DANGER OF INDIRECT FIRE: At temperature > flash point : fire hazard/increased explosion.

Explosion hazard : No direct danger of explosion.

Reactivity : decomposes further to a rise temperature: gas release/toxic fumes/corrosive/fuels (acrolein). In case of burn, formation of CO and CO₂ . May polymerizing in case of increased temperature. Violent reaction with oxydizers: fire/explosion hazard (increased). Reacts with (some) acids : fire/explosion hazard (increased).

5.3. Advice for firefighters

No additional information available

6 – ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General Measures : delimit danger area. Burning: close windows and doors. In case of fire/burning : plan evacuation.

Wash the contaminated clothes.

6.1.1. For non-first-aid workers

Appropriate protective clothes: voir « manipulation »

6.1.2. For first-aid workers

Use listed protection measures in the section 8

6.2. Environmental precautions

Do not discharge into drains/surface waters/groundwater

6.3. Methods and materials for containment and cleaning up

No additional information available

6.4. Reference to other sections

Treat wastes according to the article 13

7 – HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling temperature : ≥ 10 °C above the melting point.

7.2. Conditions for safe storage, including any incompatibilities

Maximal shelf life: < 12 mois - Hygroscopic

Storage prohibition in common: KEEP THE PRODUCT AWAY from heating source, oxidizing agent, acids, bases (high)

Storage place: Keep container in a well-ventilated place. Keep at room temperature. Store protecting against sun's rays.

Conformity with the regulation.

Specific requirements concerning packaging : SPECIAL REQUIREMENTS : reclosable, dry, clean, correctly labelled, conformity with regulation. Put the fragile packaging in a solid container.

Packaging Materials : steel, aluminium, iron, synthetic material, glass.

7.3. Specific end use(s)

No additional information available

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8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Gloves, Safety glasses, Protective clothing. Fog: anty-spray mask with filter type P1.
In case of burning : gas mask with filter type A



Protective clothing – material selection : PROVIDE A GOOD RESISTANCE : natural rubber, neoprene, PVC, viton.
PROVIDE A LOW RESISTANCE : styrene-butadiene rubber. PROVIDE A BAD RESISTANCE: polyurethane

9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state(20°C): Liquid

Appearance(room temperature) : Liquid

Color : Colorless to light yellow

Odor: Odourless

pH : 5 - 8

Melting point : < 0°C, Boiling point : >120°C, Flash point: > 120 °C

Auto-ignition temperature: >150°C, Decomposition temperature: 290 °C (glycerol) Vapor pressure at 20°C: < 0,1 hPa

Density relative to the vapor à 20 °C : No data available

Relative density : No data available

Debsity : ca. 1,23 g/cm³ (25°C)

Solubility: Water: 100g/100ml (25°C, complète), Ethanol : miscible

Log Pow : -1.76/2.6

Viscosity: ca. 150 mPa.s (20°C)

9.2. Other information

Other property : Water-soluble, Soluble in ethanol, Soluble in acetone, Soluble in ethyl acetate, Insoluble in oil/fat phase, Low volatile, Gas/vapor heavier than the air at 20°C, Hygroscopic. The raw material has a neutral,crystal clear and sirupy reaction.

10 – STABILITY AND REACTIVITY

10.1. Reactivity

Decomposes further an increase of temperature: liberation of gases/toxic fumes/corrosives/combustible (acrolein). Training of CO and CO₂ in case of combustion. It may polymerize further an increase of temperature (>200°C). Reacts violently with oxidizers (high): fire/explosion hazard (increased). Reacts with (some) acids: fire/explosion hazard (increased)

10.2. Chemical stability

Hygroscopic.

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10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to Avoid

No additional information available

10.5. Incompatible Materials

No additional information available

10.6. Hazardous Decomposition Products

Heating/combustion : liberation of gases/toxic fumes/corrosives/combustible (acrolein).

11 – TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity : Not classified

LD50 rat (oral): 12600 mg/kg

LD50 rabbit (dermal) : > 10000 mg/kg

(for glycerol 56-81-5 at 100%) LD50 rat (oral): 12600 mg/kg

(for glycerol 56-81-5 à 100%) LD50 rabbit (dermal): > 10000 mg/kg

(for glycerol 56-81-5 à 100%) ATE (voir orale): 12600,000 mg/kg

Skin corrosion/irritation: not classified (pH 5-8)

Serious eye damage/irritation: not classified (pH 5-8)

Respiratory/Skin sensitization: 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

12 - ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology – general: No additional information available.

Ecology – air: TA-Luft Klasse 5.2.5

Ecology – water: Pollute weakly the water (surface water)
Not harmful to fish (CL50(96h) > 1000 mg/l)
Not harmful to aquatic organisms (CE50 > 1000mg/l)
Not harmful to algae
Not harmful to bacteria
Bioaccumulation: no data available
Slows down the digestion of the activated sludge in >1000mg/l 50%
Easily biodegradable in the water (OECD 301D: 82%; 20 days)

LC50 fish 1	54000 mg/l (96h, SALMO GAIRDNERI/ONCORHYNCHUS MYKISS)
LC50 other aquatic organisms 1	> 1000 mg/l (96h)
LC50 other aquatic organisms 1	> 1000 mg/l (BACTERIA, BOUE ACTIVEE)
LC50 fish 2	> 1000 mg/l (96h, PISCES)
CE50 daphnia 2	> 10000 mg/l (24h, DAPHNIA MAGNA, LOCOMOTION)
TLM fish 1	> 1000 ppm (96h, PISCES)
TLM other aquatic organisms 1	> 1000 ppm (96h)

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Toxic threshold other organism aquatics 1	2900 mg/l (192h, MICROCYSTIS AERUGINOSA, TOXICITY TEST)
Toxic threshold other organism aquatics 2	> 10000 mg/l (16h, PSEUDOMONAS PUTIDA, TOXICITY TEST)
Toxic threshold algae 1	> 10000 mg/l (168h, SCENEDESMUS QUADRICAUDA, TOXICITY TEST)

For glycerol 56-81-5 à 100%	
LC50 fish 1	54000 mg/l (96h, SALMO GAIRDNERI/ONCORHYNCHUS MYKISS)
LC50 other aquatic organisms 1	> 1000 mg/l (96h)
LC50 other aquatic organisms 1	> 1000 mg/l (BACTERIA, BOUE ACTIVEE)
LC50 fish 2	> 1000 mg/l (96h, PISCES)
LC50 daphnia 2	> 10000 mg/l (24h, DAPHNIA MAGNA, LOCOMOTION)
TLM poisson 1	> 1000 ppm (96h, PISCES)
TLM other organism aquatics 1	> 1000 ppm (96h)
Toxic threshold other organism aquatics 1	2900 mg/l (192h, MICROCYSTIS AERUGINOSA, TOXICITY TEST)
Toxic threshold other organism aquatics 2	> 10000 mg/l (16h, PSEUDOMONAS PUTIDA, TOXICITY TEST)
Toxic threshold algae 1	> 10000 mg/l (168h, SCENEDESMUS QUADRICAUDA, TOXICITY TEST)

12.2. Persistence and degradability

Biochemical oxygen demand (DBO)	0.87 g O ₂ /g material
Chemical oxygen demand (DCO)	1.16 g O ₂ /g material(ISO 15705)
ThOD	1.217 g O ₂ /g material
DBO (% de DThO)	71% ThOD

For glycerol 56-81-5 à 100%	
Biochemical oxygen demand (DBO)	0.87 g O ₂ /g material
Chemical oxygen demand (DCO)	1.16 g O ₂ /g material (ISO 15705)
ThOD	1.217 g O ₂ /g material
DBO (% de DThO)	71% ThOD

12.3. Bioaccumulative potential

Log Pow : -1.76/2.6 (same thing for glycerol 56-81-5 à 100%)

12.4. Mobility in soil

Surface tension: 0,063 N/m (20°C) / same thing for glycérol 58-81-5 à 100%

Ecology - soil : No information available about biodegradability in soil / same thing for glycérol 58-81-5 à 100%

Not applicable for the water (aqua 7732-18-5)

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information: No additional information available.

13 – DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Evacuation: Absorb spilled liquid in materials such as: sand, earth, vermiculite, ou kieselguhr, limestone ground. Put the absorbed product in a container which closes (Appropriate material of the container: see "Manipulation"). Clean the remainder with plenty of water. Clean the equipment and the clothes after the work.

Regional Legislation (wastes): No additional information available.

Ecology – wastes : LCWA (Pays-Bas) : KGA category 03. Recycle by distillation. Eliminate in a licensed incinerator having a post-burner and a washer of gas/smoke. Not put down in the surface water.

European Waste Catalogue (EWC): No additional information available.

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14 – TRANSPORT INFORMATION

According to the requirements ADR / RID / IMDG / IATA / ADN

14.1. UN Number

Not classified as a dangerous good under transport regulations

14.2. UN Proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing Group

Not applicable

14.5. Environmental Hazards

Other information: No additional information available.

14.6. Special precautions for user

14.6.1. Land transport

Transport Regulation (ADR): Not applicable

Transport Regulation (RID): Not applicable

Not applicable to ADR-RID

14.6.2. Sea transport

Transport Regulation (IMDG): Not applicable

14.6.3. Air transport

Transport Regulation (IATA): Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

15 – REGULATORY INFORMATION

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

15.1.1. EU Regulations

Does not contain limited substance according to REACH, Appendix VII

Does not contain substance candidate REACH

Does not contain listed substance to REACH, Appendix XIV

Regulation UE 10/2011 (Appendix 1) : FCM x – all the components are listed (refer to Article 6.3

(b)) Recommendation BfR : Listed in XV. Silicone

XXVIII. Cross-Linked Polyurethanes as Adhesive Layers for Food Packaging Materials

XXXVI. Paper and board for food contact

XXXIX. Commodities Based on Polyurethanes

XLIV. Artificial Sausage Casings

FC EU regulatory notices : the directive 2002/72/EC of 6 August 2002 relating to plastic materials and articles intended to come into contact with foodstuffs as amended has been repealed by EU Regulation N°10/2011

15.1.2. National regulatory information

Inventory of chemicals products: Listed in AICS, DSL, ECL, ECST, ENCS, IECS, NZIoC, PICCS, TSCA, inventaires EC

Allemagne

VwVwS, reference to appendix: Hazard Class for water (WGK) 1, Present a low danger for the water (Classification according to VwVwS, appendix 4)

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WGK remark (old) : Classification polluting the water according to Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of July 27th 2005 (Anhang 2)

12th guidelines of application concerning German federal law about imission control – 12.BImSchV : Not have to follow 12th BImSchV (decre of protection against emissions) (Regulation about major accident).

Pays-Bas

SZW-lijst van kankerverwekkende stoffen : Not listed

SZW-lijst van mutagene stoffen : Not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : Not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : Not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : Not listed

Swiss guidelines (RS 817.023.21) Appendix 6 : All components are listed

CFR Title 21 – Indirect food additives : Listed in 175.300 Resinous and polymeric coatings

175.105 – Adhesives

175.125 - Pressure-sensitive adhesives

175.230 - Hot-melt strippable food coatings

175.320 - Resinous and polymeric coatings for polyolefin films

176.170 - Components of paper and paperboard in contact with aqueous and fatty foods

176.210 - Defoaming agents used in the manufacture of paper and paperboard

177.2420 - Polyester resins, cross-linked

177.2800 - Textiles and textile fibers

178.3500 - Glycerin, synthetic

CFR Title 21 – GRAS Substances (Food) : Listed in 182.90 Substances migrating to food from paper and paperboard products

15.2. Chemical Safety Assessment

No additional information available

16 – OTHER INFORMATION

Chemical Inventory List :

AICS = Australian Inventory of Chemical Substances

DSL = Canadian Domestic Substances List

ECL = Korean Existing Chemical List

ECST = Existing Chemical Substances Inventory of Taiwan

ENCS = Japanese Existing and New Chemicals Substances List

IECS = Inventory of Existing Chemicals Substances in China

NZIoC = New Zealand Inventory of Chemicals

PICCS = Philippine Inventory of Chemicals and Chemical Substances

TSCA = USA Toxic Substances Control Act

inventory EC = European Community inventories of chemicals (EINECS/ELINCS/NLP/REACH)

Health hazard NFPA: 1- Exposure may cause irritation, but only minor injuries, although no treatment is given.

Fire hazard NFPA: 1 - Must be preheated before the ignition cannot occur.

Reactivity NFPA: 0 - Normally stable, even under conditions of fire exposure, and not water reactive.

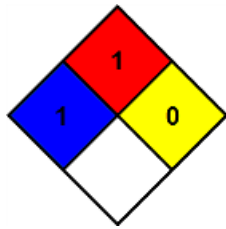
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Image NFPA :



Changed Section SDS : 15 – 16

Cause of FDS revision: No additional information available.

Other information : No additional information available.

This information is based on our current knowledge and describe the product for the only needs for the health, safety and environment. They would not be used as a guarantee about specific property of the product.