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Vegetable crude glycerine (single feed material)

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1. Product identifier

Trade name/designation:

Vegetable crude glycerine (single feed material)

Article No.:

2270

CAS No.:

56-81-5

EC No.:

200-289-5

Additional information:

The substance does not require registration according to REACH.

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

Purification to glycerol techn. grade or pharma grade, single feed material, production of biogas

Relevant identified uses:

Life cycle stage [LCS]

- M: Manufacture
- F: Formulation or re-packing
- **IS:** Use at industrial sites
- PW: Widespread use by professional workers
 - C: Consumer use

Sector of uses [SU]

- **SU 1:** Agriculture, forestry, fishery
- **SU 3:** Industrial uses: Uses of substances as such or in preparations at industrial sites
- SU 4: Manufacture of food products
- SU 5: Manufacture of textiles, leather, fur
- SU 6b: Manufacture of pulp, paper and paper products
- **SU 8:** Manufacture of bulk, large scale chemicals (including petroleum products)
- **SU 9:** Manufacture of fine chemicals
- **SU 10:** Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
- **SU 11:** Manufacture of rubber products
- SU 19: Building and construction work
- **SU 24:** Scientific research and development

Product Categories [PC]

- **PC 4:** Anti-freeze and de-icing products
- **PC 14:** Metal surface treatment products
- PC 15: Non-metal surface treatment products
- PC 19: Intermediate (precursor)
- **PC 21:** Laboratory chemicals
- **PC 23:** Leather treatment products
- PC 24: Lubricants, greases, release products
- PC 25: Metal working fluids
- PC 26: Paper and board treatment products
- PC 29: Pharmaceuticals
- PC 31: Polishes and wax blends
- PC 34: Textile dyes, finishing and impregnating products; including bleaches and other processing aids

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Process categories [PROC]

- **PROC 1:** Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
- **PROC 2:** Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
- **PROC 3:** Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
- **PROC 4:** Chemical production where opportunity for exposure arises
- **PROC 5:** Mixing or blending in batch processes
- **PROC 8a:** Transfer of substance or mixture (charging and discharging) at non-dedicated facilities **PROC 8b:** Transfer of substance or mixture (charging and discharging) at dedicated facilities
 - PROC 9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
- PROC 14: Tabletting, compression, extrusion, pelletisation, granulation
- **PROC 15:** Use as laboratory reagent

Environmental release categories [ERC]

- **ERC 1:** Manufacture of the substance
- **ERC 2:** Formulation into mixture (mixtures)
- **ERC 4:** Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
- ERC 6a: Use of intermediate
- ERC 7: Use of functional fluid at industrial site
- ERC 8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

* 1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

German Biofuels GmbH

Am Hünengrab 9

16928 Pritzwalk/Germany Telephone: +49 33986 5050 Telefax: +49 33986 50599 E-mail: info@gbfgmbh.de

1.4. Emergency telephone number

Produktion/Production, 24h: +49 172 56 82 831, +49 33986 50582 (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

Additional information:

Additional information: The toxicologic properties of methanol are not relevant due to the low residual concentration. The overall properties are dominated by the main constituent glycerol.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

According to EC directives or the corresponding national regulations the product does not have to be labelled.

Precautionary statements Response

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

No data available

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SECTION 3: Composition/information on ingredients

* 3.1. Substances

Description:

The substance contains also water and inorganic salts; ash content max. 5 %.

Additional information:

The toxicologic properties of methanol are not relevant due to the low residual concentration. The overall properties are dominated by the main constituent glycerol.

ingredients / impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 56-81-5 EC No.: 200-289-5	glycerol The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].	≥ 80 - < 85 %
CAS No.: 7732-18-5 EC No.: 231-791-2	water The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].	> 8 - < 15 %
	MONG (material organic non glycerol) The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP]. Additional information: MONG is the collective name for organic constituents separable in a distillation of crude glycerol, which are not glycerol. It consists of free fatty acids, triglycerides, polymeric glycerol and other organic residues.	> 2 - < 4 %
	Potassium salts The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP]. Additional information: Typical concentration: 2500 mg/kg	> 0 - < 1 %
CAS No.: 67-56-1 EC No.: 200-659-6 REACH No.: 01-2119433307-44-XXXX	methanol Acute Tox. 3 (H331, H311, H301), Flam. Liq. 2 (H225), STOT SE 1 (H370**)	> 0.001 - < 0.2

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

Get medical advice/attention.

Following inhalation:

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap.

IF ON CLOTHING: Immediately remove any contaminated clothing, shoes or stockings.

After eye contact:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion:

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Never give anything by mouth to an unconscious person or a person with cramps.

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

The following symptoms may occur: Nausea Headache Vomiting

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water mist alcohol resistant foam Dry extinguishing powder Carbon dioxide (CO2)

5.2. Special hazards arising from the substance or mixture

Carbon monoxide Carbon dioxide (CO2) Acrolein

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Use of protective clothing Do not breathe vapour. Provide adequate ventilation.

Protective equipment:

Refer to section 5.3

Emergency procedures:

_ _ _

6.1.2. For emergency responders

Personal protection equipment:

Refer to section 5.3

6.2. Environmental precautions

Do not empty into drains.

6.3. Methods and material for containment and cleaning up

For cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

6.4. Reference to other sections

No data available

6.5. Additional information

If appropriate sections 8 and 13 shall be referred to.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Avoid contact with eyes and skin. Do not breathe gas/vapour. Usual measures for fire prevention.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Below normal ambient temperatures, the material may solidify.

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Packaging materials:

Steel, Polyethylene, Polyolefins

Requirements for storage rooms and vessels:

Suitable container/equipment material: Steel, Polyethylene, Polyolefins

Store in a cool dry place.

Hints on storage assembly:

hygroscopic

Storage class (TRGS 510, Germany): 10 - Combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions:

Maximum storage period (time):12 month(s)

7.3. Specific end use(s)

Recommendation:

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	 Long-term occupational exposure limit value Short-term occupational exposure limit value Instantaneous value Monitoring and observation processes Remark
TRGS 900 (DE)	glycerol CAS No.: 56-81-5 EC No.: 200-289-5	① 200 mg/m³ ② 400 mg/m³ ⑤ (einatembare Fraktion)
IOELV (EU)	methanol CAS No.: 67-56-1 EC No.: 200-659-6	① 200 ppm (260 mg/m³) ⑤ (may be absorbed through the skin)
TRGS 900 (DE)	methanol CAS No.: 67-56-1 EC No.: 200-659-6	 100 ppm (130 mg/m³) 200 ppm (260 mg/m³) (kann über die Haut aufgenommen werden)

8.1.2. Biological limit values

Limit value type (country of origin)	Substance name	Limit value	① Parameter② Test material③ Time of sampling:④ Remark
TRGS 903 (DE)	methanol CAS No.: 67-56-1 EC No.: 200-659-6	15 mg/L	 Methanol Urin bei Langzeitexposition, Expositionsende bzw. Schichtende

8.1.3. DNEL-/PNEC-values

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Wash hands before breaks and after work.

8.2.2. Personal protection equipment

Eye/face protection:

Wear eye/face protection.

Skin protection:

Wash hands and face before breaks and after work and take a shower if necessary.

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Hand protection: Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Suitable material: PVC (polyvinyl chloride)

NBR (Nitrile rubber)

Thickness of the glove material: Breakthrough times and swelling properties of the material must be taken into consideration.

Respiratory protection:

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Filtering device (EN 147)

Other protection measures:

Protective clothing: Check leak tightness/impermeability prior to use.

8.2.3. Environmental exposure controls

No data available

8.3. Additional information

No relevant control limits.

No recommended monitoring procedures.

No applicable occupational exposure limit values and/or biological limit values.

SECTION 9: Physical and chemical properties

* 9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid Colour: yellowish - red brown

Odour: sweetish, penetrative Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
H	> 4 - ≤ 6	20 °C	- Nemark
Melting point	-5 - 5 °C		
Freezing point	not determined		
Initial boiling point and boiling range	280 - 300 °C		② (Data apply to the main component.)
Decomposition temperature	not determined		
Flash point	160 - 210 °C		
Evaporation rate	not determined		
Auto-ignition temperature	not determined		
Upper/lower flammability or explosive limits	not determined		
Vapour pressure	0.003 - 0.004 hPa	50 °C	② (Data apply to the main component.)
Vapour density	not determined		
Density	1.22 - 1.27 g/cm ³	20 °C	① EN ISO 12185
Relative density	not determined		
Bulk density	not determined		
Water solubility			② completely miscible
Partition coefficient: n-octanol/water	not determined	İ	
Dynamic viscosity	not determined		
Kinematic viscosity	not determined	Ì	

9.2. Other information

Danger of explosion: Vapours can form explosive mixtures with air.

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SECTION 10: Stability and reactivity

10.1. Reactivity

Possibility of hazardous reactions:

Oxidising agent Strong acid

Alkali (lye), concentrated

10.2. Chemical stability

Substance is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3. Possibility of hazardous reactions

Refer to section 10.1

10.4. Conditions to avoid

Undue heating

10.5. Incompatible materials

_

10.6. Hazardous decomposition products

Carbon monoxide

Acrolein

SECTION 11: Toxicological information

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

Substance name	Toxicological information
glycerol	LD ₅₀ oral:
CAS No.: 56-81-5	12,600 mg/kg (Rat) OECD
EC No.: 200-289-5	LD ₅₀ dermal:
	10,000 mg/kg (Rabbit) OECD
methanol	LD ₅₀ oral:
CAS No.: 67-56-1	5,628 mg/kg (Rat) OECD
EC No.: 200-659-6	LD ₅₀ dermal:
	17,100 ml/kg (Rabbit) OECD
	LC ₅₀ Acute inhalation toxicity (gas):
	85.26 mg/l 4 h (Rat) OECD

Skin corrosion/irritation:

Species: Rabbit (24 h)

Evaluation: slightly irritant but not relevant for classification.

Serious eye damage/irritation:

Species: Rabbit (24 h)

Evaluation slightly irritant but not relevant for classification.

Respiratory or skin sensitisation:

No information available.

Carcinogenicity:

This substance is considered not to be CMR relevant.

Additional information:

Specific symptoms in animal studies: No information available.

Repeated dose toxicity (subacute, subchronic, chronic): No information available.

Observations relevant to classification: No information available.

Other observations: The following symptoms may occur: Nausea Headache Vomiting

Other information: The toxicologic properties of methanol are not relevant due to the low residual

concentration. The overall properties are dominated by the main constituent glycerol.

11.2. Information on other hazards

No data available

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SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity:

 LC_{50} - Carassius auratus: > 5000 mg/l LC_{50} - Pimephales promelas: 44000 mg/l LC_{50} - Oncorhynchus mykiss: 67500 mg/l (96h)

Terrestrial toxicity:

No information available.

Effects in sewage plants:

No experimental data available but good biodegradability expected based on conclusion by analogy.

12.2. Persistence and degradability

Additional information:

Further ecological information: No information available.

12.3. Bioaccumulative potential

Accumulation / Evaluation:

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

Substance name	Results of PBT and vPvB assessment
glycerol CAS No.: 56-81-5 EC No.: 200-289-5	_
methanol CAS No.: 67-56-1 EC No.: 200-659-6	_
water CAS No.: 7732-18-5 EC No.: 231-791-2	_

No experimental data available but good biodegradability expected based on conclusion by analogy.

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

Chemical oyxgen demand (COD): 1100 mg/g (ca.) Biochemical oxygen demand: 1000 mg/g (ca.)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Consult the appropriate local waste disposal expert about waste disposal.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

07 06 99 Wastes not otherwise specified

Remark:

Crude glycerine.

Die Entsorgung ist NICHT nachweispflichtig.

Waste treatment options

Appropriate disposal / Package:

Handle contaminated packages in the same way as the substance itself. Wash with plenty of water.

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SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)	
14.1. UN number or	4.1. UN number or ID number			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	
14.2. UN proper ship	ping name			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	
14.3. Transport hazard class(es)				
not relevant	not relevant	not relevant	not relevant	
14.4. Packing group				
not relevant	not relevant	not relevant	not relevant	
14.5. Environmental hazards				
not relevant	not relevant	not relevant	not relevant	
14.6. Special precau	14.6. Special precautions for user			
not relevant	not relevant	not relevant	not relevant	

14.7. Maritime transport in bulk according to IMO instruments

IBC Code/2014: Pollution Category Z

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: This product is not assigned to a hazard category.

The toxicologic properties of methanol are not relevant due to the low residual concentration. The overall properties are dominated by the main constituent glycerol.

15.1.2. National regulations

[DE] National regulations

Restrictions of occupation

No

Störfallverordnung

for substances contained in the product:

This product is not assigned to a hazard category.

Named dangerous substances:

Methanol

Remark:

Water hazard class

WGK:

1 - schwach wassergefährdend

Source:

AwSV Nr. 116 (Rigoletto)

Remark:

Self-classification (mixture; calculation rule).

Other regulations, restrictions and prohibition regulations

Futtermittel, Nr. 12.07.03 der Positivliste (D)

Verordnung (EG) Nr. 767/2009 über das Inverkehrbringen und die Verwendung von Futtermitteln.

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Gesetz Nr. 91/1996 Slg., In der Fassung. Dekret Nr. 295/2015 Coll., Über die Umsetzung bestimmter Bestimmungen des Feeds Act.

Verordnung (EG) Nr. 183/2005 des Europäischen Parlaments und des Rates vom 12. Januar 2005 zur Festlegung von Anforderungen an die Futtermittelhygiene.

Verordnung (EG) Nr. 2002/32 / EG über unerwünschte Stoffe in Futtermitteln.

Verordnung (EG) Nr. 1829/2003 des Europäischen Parlaments und des Rates über genetisch veränderte Lebensmittel und Futtermittel.

Verordnung (EG) Nr. 1830/2003 über die Rückverfolgbarkeit und Kennzeichnung von GVO und die Rückverfolgbarkeit von aus GVO hergestellten Lebensmitteln und Futtermitteln.

Verordnung (EG) Nr. 999/2001 mit Vorschriften zur Verhütung, Kontrolle und Tilgung bestimmter transmissibler spongiformer Enzephalopathien in der geänderten Fassung.

15.2. Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1. Indication of changes

[1.3.	Details of the supplier of the safety data sheet	
	3.1.	Substances	
ſ	9.1.	Information on basic physical and chemical properties	

16.2. Abbreviations and acronyms

Abbreviations:

CSA: Chemical Safety Assessment

PBT: Substance with persistent, bioaccumulative and toxic properties.

vPvB: Substance with very persistent and very bioaccumulative properties.

MFSU: Manufacture, formulation, supply and use

Rigoletto: Database of the German Federal Environmental Agency, which contains the classification of substances according to their water hazard class (https://webrigoletto.uba.de/Rigoletto/Home/Search).

16.3. Key literature references and sources for data

No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statement	Hazard statements	
H225	Highly flammable liquid and vapour.	
H301	Toxic if swallowed.	
H311	Toxic in contact with skin.	
H331	Toxic if inhaled.	
H370	Causes damage to organs.	
H371	May cause damage to organs.	

16.6. Training advice

No data available

16.7. Additional information

This SDS is not required by Article 31 of Regulation 1907/2006/EU as the substance is not classified as hazardous, however, to comply with Article 32 of REACH and provide customers with relevant information the format of the SDS (according to Regulation 453/2010/EU) has been used.

Given data sheets are based on our present experiences, however they are no assurance of product properties and do not justify a contractual legal relationship.

* Data changed compared with the previous version