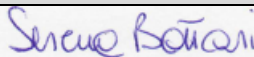
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At the above-mentioned date this product is not classed as dangerous, does not contain any compound classed as dangerous (PBT, vPvB, SVHC, etc.) or having an EC occupational exposure limit. Therefore Art. 31 of REACH Regulation does not provide for any issue of a MSDS.

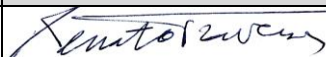
However this document, to convey to whom it may concern along the supplying chain, includes relevant Information about the product.

PRODUCT INFORMATION SHEET

DIGLYCERINE


Compiled by	Function	Date	Signature
S. Bottari	QA Manager	25/01/2019	

Verified by	Function	Date	Signature
C. Merlo	QC Manager	25/01/2019	

Approved by	Function	Date	Signature
R. Traversa	Technical Supervisor	25/01/2019	

HISTORY OF CHANGES:

Revision	Date	Description of changes
00	16/04/2015	Issue
01	25/01/2019	Modification of INCI name (typing error); adjustment of the table in Chapter 3.1; implementation of Inventory Information.

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1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product identifiers

- Product name: DIGLYCERINE
- Chemical name: Oxybispropanediol, Diglycerol
- Other Non-proprietary Name(s): Diglycerin (INCI name),
- Chemical formula: C₆H₁₄O₅
- R.E.A.C.H.Registration numbers: 01-2119941694-30-0001

1.2 Identified uses

- Identified uses:
Cosmetics
Chemical Industry
Food Industry

1.3 Manufacturer's details

- Manufacturer: SPIGA NORD S.p.A.
- Address: Via Pontevecchio, 55 - 16042 Carasco (GE) - ITALY
- Telephone: +39.0185.3525.1
- Fax: +39.0185.3525.31
- E-mail: info@spiganord.com

1.4 Emergency telephone number + 39.0185.3525.1

2. HAZARDS IDENTIFICATION

2.1 GHS classification

2.1.1. European Regulation (EC) 1272/2008, as amended
Not classified as hazardous.


2.1.2. European Regulation 67/548/CEE or 1999/45/EC, as amended
Not classified as hazardous.

2.2 EC label – According to Regulation (EC) 1272/2008, as amended

- Labelling: not required.
- Hazard symbol(s): none.
- Risk-phrase(s): none.

2.3 Other dangers

None.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Main component

Substance name	CAS number	Concentration
Diglycerol	59113-36-9	>= 90 %

4. FIRST AID MEASURES

4.1 First-aid measures

4.1.1. General

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.2. Inhalation

Move to fresh air. If symptoms persist, call a physician.

4.1.3. Skin contact

Remove contaminated clothing and shoes. Seek medical advice if irritation develops. Launder clothes before re-use. After contact with skin, wash immediately with soap and water.

4.1.4. Eye contact

Flush eyes with running water for several minutes, while keeping the eyelids wide open. Seek medical advice if irritation develops.

4.1.5. Ingestion

If swallowed, rinse mouth with water. Do not induce vomiting.

4.2 Most important symptoms/effects

No typical symptoms and effects known.

4.3 Need to get medical advice

- Advice to physician: symptomatic treatment is advised.

5. FIRE-FIGHTING MEASURES


5.1 Extinguishing media

- Suitable extinguishing media: to fight fire use powder, foam, carbon dioxide, water, water spray.
- Unsuitable extinguishing media: no restriction.

5.2 Specific hazard arising from the chemical

- Combustible material.
- Hazardous decomposition products formed under fire conditions.
- Vapours may form explosive mixture with air.

5.3 Special protective action for fire-fighters

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- Evacuate all non-essential personnel.
- Wear self-contained breathing apparatus when in close proximity or in confined spaces.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions

Usual precautions for handling chemicals should be observed.

6.2 Environmental precautions

Should not be released into the environment.

6.3 Methods and materials for containment and cleaning up

Collect as much as possible in a clean and properly labelled container for (preferable) reuse or disposal. Clean the area with large quantities of water.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

- Usual precautions for handling chemicals should be observed.
- Ensure adequate ventilation.
- Keep the product preferably between 45 and 65 °C in order to decrease its viscosity.

7.2 Conditions of storage including incompatibilities

- Storage requirements: Store in a well ventilated place. Keep in properly labelled containers. Keep away from heat/open flames/hot surfaces. Keep away from incompatible products.

7.3 Specific use(s)

For further information please contact supplier.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION


8.1 Control parameters

8.1.1 Exposure limit values

- US ACGIH threshold limit values
Remarks = none established

8.2 Exposure controls

- #### 8.2.1 Appropriate engineering controls:
- usual precautionary measures for handling chemicals should be observed.

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8.2.2 Individual protection measures

- Respiratory protection: no special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.
- Hand protection: use chemical-resistant gloves.
- Eye protection: wear goggles.
- Skin and body protection: long sleeved clothing.
- Other information: usual precautions for handling chemicals should be observed.

- 8.2.3 Environmental exposure controls: dispose of rinse water in accordance with local and national regulations.


9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Physical and chemical properties

- Appearance at 20°C: viscous liquid
- Odour: odourless
- Colour: colorless
- pH value/range: 5-6 at 20°C
- Melting point/range: no data available
- Boiling point/range: 205 °C (1,3 hPa)
- Flash point: 230°C (open cup)
- Evaporation rate: no data available
- Flammability (solid, gas): not applicable
- Flammability: vapours may form explosive mixture with air (glycerol)
- Explosion limits: not explosive
- Vapour pressure at 20 °C: < 1 hPa (20°C)
- Vapour density: no data available
- Density at 20°C: 1,28 kg/dm³
- Solubility: in water, alcohol
- Partition coefficient n-octanol-water: log Pow -1,76 at 20°C
- Autoignition temperature: no data available
- Decomposition temperature: > 275 °C
- Viscosity at 25°C: 12.000 – 13.000 mPa*s
- Explosive properties: none known
- Oxidizing properties: none known

10. STABILITY AND REACTIVITY

- 10.1 Reactivity** Stable under normal operational procedure.
- 10.2 Chemical stability** No decomposition if stored and handled properly.
- 10.3 Possible dangerous reactions** Explosive when mixed with oxidizing substances.
- 10.4 Conditions to avoid** Heat, flames and sparks.
- 10.5 Materials to avoid** Avoid contact with strong oxidizing agents and strong acids.

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10.6 Hazardous decomposition products Carbon monoxide, Acroleine (T > 250 °C).

11. TOXICOLOGICAL INFORMATION

11.1 Information about toxicological effects

- Acute toxicity: DL50/oral/rat >2000 mg/kg
- Irritation: Skin rabbit: no irritation (Lit.)
Eye rabbit: no irritation (Lit.)

12. ECOLOGICAL INFORMATION

12.1 Toxicity

- Fishes, Poecilia reticulata: 96h, LC50 > 1.000 mg/l
- Crustaceans, Daphnia magna: 48h, LC50 > 10.000 mg/l
- Algae Selenastrum capricornutum: 96h, EC50 > 1.000 mg/l

12.2 Persistence and degradability Readily biodegradable.

12.3 Bioaccumulative potential No suspected bioaccumulation.

12.4 Mobility No data available.


12.5 Other adverse effects No data available.

13. DISPOSAL CONSIDERATION

- Waste disposal methods: Re-use/recycling of waste highly recommended. Disposal according to local regulations. The product can be discharged into a biological treatment plant. Send the product to an authorized industrial waste incinerator.
- Contaminated packaging: Rinse the empty containers with plenty of water and treat the effluent in the same way as waste. Dispose of the containers by dispatching them to an approved industrial incineration facility. The empty and clean containers are to be reused in conformity with regulations.

14. TRANSPORT INFORMATION

- No restriction

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15. REGULATORY INFORMATION

15.1 Applicable laws or regulations

Inventory Information	Status
TSCA - United States Inventory of Toxic Substances Control	Listed on Inventory
EINECS/ ELINCS - European Inventory of Existing Commercial Substances	Listed on Inventory
IECSC - Inventory of Existing Chemical Substances in China	Listed on Inventory
ENCS - Japanese Existing and New Chemical Substances Inventory	Listed on Inventory
ISHL - Japanese Industrial Safety and Health Law	Not Listed on Inventory
KECL - Korean Existing and Evaluated Chemical Substances	Listed on Inventory
TCSI - Taiwan Chemical Substance Inventory	Listed on Inventory
AICS - Australian Inventory of Chemical Substances	Not Listed on Inventory
DSL - Canadian Domestic Substances List	Listed on Inventory
NDSL - Canadian Non-domestic Substances List	Not Listed on Inventory
NZIoC - New Zealand Inventory of Chemicals	Not Listed on Inventory
PICCS - Philippine Inventory of Chemicals and Chemical Substances	Not Listed on Inventory
TECI - Thailand Existing Chemicals Inventory	Listed on Inventory

This product is not dangerous according to EU Regulations 1272/2008/EEC.

16. OTHER INFORMATION

The previous information corresponds to the current state of our knowledge and experience of the product and is not exhaustive. This applies to product which is conform to the supplier's technical specification unless otherwise stated. In case of combinations and mixtures with other products it is responsibility of the user to avoid the occurrence of dangerous situations. In any case the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and protection of human welfare and of the environment.