

DIGLYCERIN

Revision Date 03/18/2015

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

- Trade name DIGLYCERIN
- Chemical Name Oxybispropanediol
- Synonyms Diglycerol
- Molecular formula C₆H₁₄O₅

1.2 Relevant identified uses of the substance or mixture and uses advised against**Uses of the Substance / Mixture**

- Chemical industry
- Cosmetics

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

Chanjao Longevity Co., Ltd.
50 Ramindra 14, Bangkok
THAILAND
+66 02 002 7 002
care@myskinrecipes.com

Date Prepared

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1.4 Emergency telephone

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC 800-424-9300 within the United States and Canada, or 703-527-3887 for international collect calls.

SECTION 2: Hazards identification**2.1 Emergency overview****Appearance**

Form: viscous
Physical state: liquid
Color: colorless
Odor: odorless

Warning statements

- none

2.2 Potential Health Effects**Inhalation effect**

- Not a respiratory irritant

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Skin effect

- No skin irritation

Eye effect

- No eye irritation

Ingestion effect

- Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic effects

- This product does not contain any ingredient designated by IARC or ACGIH as probable or suspected human carcinogens.

SECTION 3: Composition/information on ingredients**3.1 Information on Components and Impurities****WHMIS Hazardous Ingredients and Impurities**

- No ingredients are hazardous.

Non Hazardous Ingredients and Impurities

Chemical Name	Identification number CAS-No.	Concentration [%]
Propanediol, oxybis- [INCI: DIGLYCERIN]	59113-36-9	>= 90

SECTION 4: First aid measures**4.1 Description of first-aid measures****In case of inhalation**

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

In case of skin contact

- Wash off with soap and water.

In case of eye contact

- Rinse thoroughly with plenty of water, also under the eyelids.
- If eye irritation persists, consult a specialist.

In case of ingestion

- Rinse mouth with water.
- Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed**In case of inhalation****Effects**

- Not a respiratory irritant

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In case of skin contact**Effects**

- No skin irritation

In case of eye contact**Effects**

- No eye irritation

In case of ingestion**Effects**

- Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3 Indication of any immediate medical attention and special treatment needed**Notes to physician**

- When symptoms persist or in all cases of doubt seek medical advice.

SECTION 5: Firefighting measures**Flash point**

ca.446 °F (230 °C)
Method: open cup
Combustible material

Autoignition temperature

ca.734 °F (390 °C)

Flammability / Explosive limit

no data available

5.1 Extinguishing media**Suitable extinguishing media**

- powder
- Foam
- Carbon dioxide (CO₂)
- Water
- Water spray

Unsuitable extinguishing media

- None known.

5.2 Special hazards arising from the substance or mixture**Specific hazards during fire fighting**

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

Hazardous combustion products:

- Carbon monoxide

5.3 Advice for firefighters**Special protective equipment for fire-fighters**

- In the event of fire, wear self-contained breathing apparatus.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****Advice for non-emergency personnel**

- Evacuate personnel to safe areas.

Advice for emergency responders

- Use personal protective equipment.
- Prevent further leakage or spillage.

6.2 Environmental precautions

- Should not be released into the environment.
- Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

- Dam up.
- Soak up with inert absorbent material.
- Prevent product from entering sewage system.
- Keep in properly labeled containers.
- Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

- Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

- Keep away from incompatible products
- Ensure adequate ventilation.
- Avoid contact with skin and eyes.

Hygiene measures

- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

- Store in original container.
- Store in a well-ventilated place. Keep cool.
- Keep in properly labeled containers.
- Keep container closed.
- Keep in a contained area
- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Keep away from incompatible products

7.3 Specific end use(s)

- Contact your supplier for additional information

SECTION 8: Exposure controls/personal protection

Introductory Remarks: These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1 Control parameters

- Contains no substances with occupational exposure limit values.

8.2 Exposure controls**Control measures****Engineering measures**

- Provide adequate ventilation.

Individual protection measures**Respiratory protection**

- Not required; except in case of aerosol formation.
- Respirator with a vapor filter (EN 141)
- Use only respiratory protection that conforms to international/ national standards.
- Use NIOSH approved respiratory protection.

Hand protection

- Impervious gloves

Suitable material

- PVC
- Neoprene
- Natural Rubber

- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection

- If splashes are likely to occur, wear:
- Goggles

Skin and body protection

- Long sleeved clothing

Hygiene measures

- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

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SECTION 9: Physical and chemical properties

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product information phone number in Section 1 for its exact specifications.

9.1 Information on basic physical and chemical properties

<u>Appearance</u>	<u>Form</u> : viscous <u>Physical state</u> : liquid <u>Color</u> : colorless
<u>Odor</u>	odorless
<u>Odor Threshold</u>	no data available
<u>pH</u>	no data available
<u>Melting point/range</u>	> 482 °F (> 250 °C) Decomposition: yes
<u>Boiling point/boiling range</u>	> 482 °F (> 250 °C) Thermal decomposition: yes
<u>Flash point</u>	ca. 446 °F (230 °C) Method: open cup Combustible material
<u>Evaporation rate (Butylacetate = 1)</u>	no data available
<u>Flammability (liquids)</u>	The product is not flammable.
<u>Flammability / Explosive limit</u>	<u>Explosiveness</u> : Not explosive
<u>Autoignition temperature</u>	ca. 734 °F (390 °C)
<u>Vapor pressure</u>	< 0.008 mmHg (< 0.01 hPa) (68 °F (20 °C))
<u>Vapor density</u>	no data available
<u>Density</u>	<u>Bulk density</u> : Not applicable <u>Relative density</u> : 1.28 (68 °F (20 °C))
<u>Solubility</u>	<u>Water solubility</u> : soluble > 1,000 g/l (68 °F (20 °C)) <u>Solubility in other solvents</u> : Alcohol : soluble
<u>Partition coefficient: n-octanol/water</u>	log Pow: -2.5 (68 °F (20 °C))
<u>Thermal decomposition</u>	no data available

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Viscosity Viscosity, dynamic : 12 - 13 mPa.s (77 °F (25 °C))
Viscosity, kinematic : 17.474 mm²/s

Explosive properties no data available

Oxidizing properties Not considered as oxidizing.

9.2 Other information

Surface tension 73.1 mN/m 20 mg/l (68 °F (20 °C))

Molecular weight 166.2 g/mol

SECTION 10: Stability and reactivity**10.1 Reactivity**

- no data available

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- Explosive when mixed with oxidizing substances.

10.4 Conditions to avoid

- To avoid thermal decomposition, do not overheat.
- Heat, flames and sparks.

10.5 Incompatible materials

- Oxidizing agents
- Strong acids
- Chlorine
- Fluorine
- Alcohol

10.6 Hazardous decomposition products

- Carbon monoxide

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity**

Acute oral toxicity LD50 : > 2,000 mg/kg - Rat

Acute inhalation toxicity no data available

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Acute dermal toxicity	LD50 : > 18.7 g/kg - Rabbit
Acute toxicity (other routes of administration)	no data available
<u>Skin corrosion/irritation</u>	Rabbit No skin irritation
<u>Serious eye damage/eye irritation</u>	Rabbit No eye irritation
<u>Respiratory or skin sensitization</u>	Guinea pig Did not cause sensitization on laboratory animals.
<u>Mutagenicity</u>	
Genotoxicity in vitro	In vitro tests did not show mutagenic effects
Genotoxicity in vivo	no data available
<u>Carcinogenicity</u>	no data available

This product does not contain any ingredient designated as probable or suspected human carcinogens by:

IARC
ACGIH

Toxicity for reproduction and development**Toxicity to reproduction / fertility**

Rat
Oral
NOAEL parent: 1,310 mg/kg
Developmental Toxicity

Developmental Toxicity/Teratogenicity

Rat
Application Route: Oral
NOAEL maternal: 1,310 mg/kg
Developmental Toxicity

STOT

STOT-single exposure no data available

STOT-repeated exposure

Inhalation - Rat
NOAEL: 0.033 mg/l

Oral - Rat
NOAEL: 10000 mg/kg

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Inhalation 90 Days - Rat
NOAEL: 0.165 mg/l

Prolonged exposure
Target Organs: Gastro-intestinal system
irritant effects

Repeated exposure
no systemic effect observed

CMR effects**Mutagenicity**

In vitro tests did not show mutagenic effects

Aspiration toxicity

no data available

SECTION 12: Ecological information**12.1 Toxicity****Aquatic Compartment****Toxicity to aquatic plants**

EC50 - 72 h : > 100 mg/l - Pseudokirchneriella subcapitata (green algae)
Growth rate

12.2 Persistence and degradability**Abiotic degradation****Photodegradation**

non-significant hydrolysis

12.3 Bioaccumulative potential**Bioconcentration factor (BCF)**

non-suspected bioaccumulation
Bioconcentration

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product Disposal**

- In accordance with local and national regulations.
- The organic ingredients can be biodegraded in a sewage plant after neutralization.
- Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

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Advice on cleaning and disposal of packaging

- Dispose of as unused product.
- Where possible recycling is preferred to disposal or incineration.

SECTION 14: Transport information**TDG**

not regulated

DOT

not regulated

NOM

no data available

IMDG

not regulated

IATA

not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transportation regulations for hazardous materials, it would be advisable to check their validity with your sales office.

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SECTION 15: Regulatory information**15.1 Notification status**

Inventory Information	Status
United States TSCA Inventory	In compliance with the inventory
Mexico INSQ (INSQ)	One or more components not listed on inventory
Canadian Domestic Substances List (DSL)	Listed on Inventory
New Zealand. Inventory of Chemical Substances	One or more components not listed on inventory
Australia Inventory of Chemical Substances (AICS)	One or more components not listed on inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	One or more components not listed on inventory

15.2 WHMIS (Workplace Hazardous Materials Information System) Classification

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Classification Not listed

15.3 Other regulations

no data available

SECTION 16: Other information**NFPA (National Fire Protection Association) - Classification**

Health	0 minimal
Flammability	1 slight
Instability or Reactivity	1 slight
Special Notices	None

HMIS (Hazardous Materials Identification System (Paint & Coating)) - Classification

Health	0 minimal
Flammability	1 slight
Reactivity	1 slight
PPE	Determined by User; dependent on local conditions

- ACGIH American Conference of Governmental Industrial Hygienists
- OSHA Occupational Safety and Health Administration

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- NTP National Toxicology Program
 - IARC International Agency for Research on Cancer
 - NIOSH National Institute for Occupational Safety and Health

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. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose, and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in another manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.