

Safety Data Sheet

according to GHS 3rd Revision, Annex IV

Printing date 25.09.2017

Version number 4

Revision: 25.09.2017

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

- **Product identifier**

- **Trade name:** PALMERA G995U

- **Description:** Glycerine USP

- **CAS Number:**

56-81-5

- **EC number:**

200-289-5

- **Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

- **Application of the substance / the mixture**

Additive

Flavouring agents

Food additives

Coating material

Chemical intermediate

Chemicals for synthesis

Lubricant

Intermediate

Preparation

Plasticiser

Skin cosmetics

Personal care

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

KL-Kepong Oleomas Sdn. Bhd.

No. 25, Jalan Sg Pinang 5/18,

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MALAYSIA

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- **Further information obtainable from:** enquiry@klkoleo.com

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· Emergency telephone number:

+603 3101 2633 (KL-Kepong Oleomas Sdn. Bhd.)

+603 6034 4800 (Palm-Oleo Sdn. Bhd.)

+86 512 8259 2028 2866 (Taiko Palm-Oleo (Zhangjiagang) Co. Ltd)

+32 3575 5555 (KLK Emmerich GmbH - Emmerich an Rhein)

2 Hazards identification**· Classification of the substance or mixture**

The substance is not classified according to the Globally Harmonised System (GHS).

· Label elements**· GHS label elements** Not applicable**· Hazard pictograms** Not applicable**· Signal word** Not applicable**· Hazard statements** Not applicable**· Other hazards****· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.**3 Composition/information on ingredients****· Chemical characterization: Substance****· CAS No. Description**

56-81-5 Glycerol

· Identification number(s)**· EC number:** 200-289-5**· Additional information:**

The product is not classified as hazardous to health or environment according to the CLP regulation.

4 First aid measures**· Description of first aid measures****· General information:** No special measures required.**· After inhalation:** Supply fresh air.**· After skin contact:** Immediately wash with water and soap and rinse thoroughly.**· After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

· Information for doctor:**· Most important symptoms and effects, both acute and delayed** No further relevant information available.**· Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Firefighting measures**· Extinguishing media****· Suitable extinguishing agents:**CO₂, powder or water spray. Fight larger fire with alcohol resistant foam.

Sand

· Special hazards arising from the substance or mixture

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Carbon monoxide (CO)

· Advice for firefighters Avoid breathing dust/fume/gas/mist/vapours/spray.

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- **Protective equipment:** In case of insufficient ventilation, wear suitable respiratory equipment.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**
Absorb liquid components with liquid-binding material.
Dispose of the material collected according to regulations.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Keep away from heat and direct sunlight.
- **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**
Protect from heat and direct sunlight.
Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Viscous
Colour:	Colourless
- **Odour:** Characteristic
- **Odour threshold:** Not determined.

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· pH-value:	Not determined.
· Change in condition	
Melting point/freezing point:	ca. 18°C
Boiling point/ Boiling range:	ca. 290°C
· Flash point:	ca. 177°C (Cleveland Open Cup)
· Flammability (solid, gas):	Not applicable.
· Auto ignition temperature:	ca. 400°C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Not determined.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20°C:	ca. < 0,01hPa
· Density at 20°C:	ca. 1,26g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient: n-octanol/water: - 1.76log Kow	
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not determined.

10 Stability and reactivity

- **Reactivity** In case of warming: Vapours can form explosive mixtures with air.
- **Chemical stability** Stable at environment temperature.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Reacts violently with oxidising agents.
- **Conditions to avoid** See Section 7 for information on safe handling.
- **Incompatible materials:** See Section 7 for information on safe handling.
- **Hazardous decomposition products:**
Irritant gases/vapours
Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**

LD/LC50 values relevant for classification:

56-81-5 Glycerol

Oral	LD50	12 600 mg/kg bw (Rat)
Dermal	LD50	> 21 900 mg/kg bw (Rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritating effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

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· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Carcinogenicity: No further relevant information available.

Mutagenicity: Negative

Toxicity for reproduction: No further relevant information available.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

56-81-5 Glycerol

LC100 (96h) 51 000 - 57 000 mg/L (Daphnia magna)

EC50 (24h) > 10 000 mg/L (Fish, *Leuciscus idus melanotus*)EC50 10000 mg/L (Algae, *Scenedesmus quadricauda*)

· **Persistence and degradability** Easily biodegradable

· **Other information:**

CAS No. 56-81-5:

OECD 301 - Ready Biodegradability (Closed Bottle Test)

92% degradation after 30 days.

· **Behaviour in environmental systems:**

· **Bioaccumulative potential**

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

WGK Registration 116 for CAS No. 56-81-5.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation** Must be specially treated adhering to official regulations.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**

· **ADR/RID/ADN, ADN, IMDG, IATA** Not regulated

· **UN proper shipping name**

· **ADR/RID/ADN, ADN, IMDG, IATA** Not regulated

· **Transport hazard class(es)**

· **ADR/RID/ADN, ADN, IMDG, IATA**

· **Class** Not regulated

· **Packing group**

· **ADR/RID/ADN, IMDG, IATA** Not regulated

· **Environmental hazards:**

· **Marine pollutant:** No

· **Special precautions for user** Not applicable.

· **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Product name: Glycerine

Pollution category: Z

Ship type: 2

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UN "Model Regulation":	Not regulated
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15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **GHS label elements** Not applicable
- **Hazard pictograms** Not applicable
- **Signal word** Not applicable
- **Hazard statements** Not applicable
- **Other regulations, limitations and prohibitive regulations**

Positive Country Substance Listing for CAS No. 56-81-5:

USA (TSCA) : ID 123, Canada (DSL), Europe (EINECS) : 200-289-5, Japan (ENCS) : 2-242, Australia (AICS), Korea (ECL) : KE-29297, China (IECSC), Philippines (PICCS), New Zealand (NZIOC), Taiwan (CSNN).

Note: The substance name and CAS numbers which are used for this product in the stated inventories may deviate from the information listed in Section 3.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** enquiry@klkoleo.com

- **Contact:** enquiry@klkoleo.com

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

LDLo: Lowest Published Lethal Dose

RA: Read Across

LoS: Limit of Solubility

IVIS: In Vitro Irritation Score

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

- **Sources**

Annex 12 of Resolution MEPC.225(64) 2012 Amendments to The International Code For The Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code).

CCRIS-Chemical Carcinogenesis Research Information System for Cas No. 56-81-5

CIR, Safety Assessment of Glycerine as Used in Cosmetic. January 14, 2015, page 4 & 12

Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Third Revised Edition.

HSDB for Cas No. 56-81-5

IMO (2007). IBC Code 2007 Edition.

IMO (2008). IMDG Code International Maritime Dangerous Goods Code. Incorporating Amendment 34-08. 2008 Edition, Volume 1 & 2.

IUCLID for Cas No. 56-81-5, dated 18-Feb-2000.

Official Journal of the European Union Regulation (EC) No 1272/2008.

Official Journal of the European Union Regulation (EC) No 1907/2006.

Official Journal of the European Union Commission Regulation (EU) No 453/2010.

Official Journal of the European Union Commission Regulation (EU) 2015/830.

PAN Pesticide Database for Cas No. 56-81-5

UNEP Publication Feb 2007. SIDS Initial Assessment Report. Paris, France. (26-27 Mar 2002). Cas No: 56-81-5, Glycerol.

- *** Data compared to the previous version altered.**

PALMERA G995U - Standard

Revision 1 (14 Mar 2011)

New issuance in GHS/CLP format.

Revision 2 (15 May 2012)

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Sect. 9 - Revise solubility in/miscibility with water to "Fully Miscible" due to erroneous.

Revision 3 (22 Jan 2015)

Sect. 1 - Update information under sub-heading "Application of the substance".

Sect. 12 - Update WGK information.

Sect. 15 - Update Positive Country Substance Listing.

Revision 4 (25 Sept 2017)

Sect. 1 - Add application of substance as following:

- 1) Skin cosmetics
- 2) Additive
- 3) Flavouring agent
- 4) Food additives
- 5) Coating material
- 6) Plasticiser
- 7) Chemical intermediate
- 8) Chemical for synthesis
- 9) Lubricant
- 10) Intermediate
- 11) Personal care

Sect. 2 - Revise reporting format for hazard identification.

Sect. 4 - Revise after inhalation phrase to "Supply fresh air".

Sect. 5 - Add sand as suitable extinguishing agents. Revise reporting hazard to "Under certain fire condition, traces of toxic gases cannot be excluded.:eg, Carbon Monoxide.

Sect. 6 – Update phrases for Method and materials containment and cleaning up.

Sect. 8 - Clearly define status of monitoring at work place. Update safety phrases for respiratory protection.

Sect. 11 & 12 – Update toxicological and ecological information.

Sect. 12 - Report test method and degradation percentage for biodegradation data.

Sect. 16 - Update sources for compiling safety data sheet

— STD —