

Safety Data Sheet(SDS)

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

- 1) Product identifier : NEOPENTYL GLYCOL 500KG FLECON
- 2) Relevant identified uses of the substance or mixture and uses advised against
 - Relevant identified uses
 - 1.Feed materials, Intermediates
 - Uses advised against
권고 용도의 사용하지 마시오
- 3) Supplier information
 - Company name [Manufacture]
Company : LGC Yeosu (Yongseong)
Address : 58, Yeosusandan 4-ro, Yeosu-si, Jeollanam-do, Republic of Korea

Emergency number :

2. HAZARD IDENTIFICATION

- 1) Hazard classification
 - Serious eye damage/eye irritation Category 1

- 2) Allocation label elements

Hazard pictograms



Signal word

- DANGER

Hazard statements

H318 Causes serious eye damage

Precautionary statements

- Prevention

P280 Wear protective gloves/protective clothing/eye protection/face protection.

- 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.

P310 Immediately receive medical institutions and doctors' consultation.

3) Other hazards No data available

o Product NFPA Level

Health	Flammability	Reactivity
1	1	0

(※ 0 = Insufficient , 1 = Slightly , 2 = ordinary , 3 = Highness , 4 = Very high)

3. Composition/Information on ingredients

Components	Common name	CAS No.	PCT(wt%)
Neopentyl glycol	Neopentyl glycol	126-30-7	100

4. FIRST AID MEASURES

1) Following eye contact

- Seek immediate medical assistance.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

2) Following skin contact

- For minor skin contact, avoid spreading material on unaffected skin.
- Seek immediate medical assistance.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.

3) Following inhalation

- Keep victim warm and quiet.
- Move to fresh air.
- Administer oxygen if breathing is difficult.
- Give artificial respiration if victim is not breathing.

4) Following ingestion

- Seek immediate medical assistance.

5) Advice to physician

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. FIRE FIGHTING MEASURES

1) Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media
 - CO₂.
 - Dry chemical.
 - Water spray.
 - Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
 - Use dry sand or earth to smother fire.
- Unsuitable extinguishing media
 - Direct water.

2) Special hazards arising from the substance or mixture

- Pyrolytic product
 - Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
 - During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
- Risk of fire and explosion
 - Containers may explode when heated.
 - Some may burn but none ignite readily.
- Other
 - No data available

3) Special protective equipment for firefighters

- Rescuers should put on appropriate protective gear.
- Dike fire-control water for later disposal; do not scatter the material.
- Substance may be transported in a molten form.
- Move containers from fire area if you can do it without risk.
- Evacuate area and fight fire from a safe distance.
- Fire involving Tanks: For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.
- Fire involving Tanks: Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

- Fire involving Tanks: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Fire involving Tanks: ALWAYS stay away from tanks engulfed in fire.

6. ACCIDENTAL RELEASE MEASURES

1) Health considerations and protective equipment

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Clean up spills immediately, observing precautions in Protective Equipment section.
- Stop leak if you can do it without risk.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Cover with plastic sheet to prevent spreading.
- Please note that materials and conditions to be avoided.

2) Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

3) For cleaning up

- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container.
- Absorb the liquid and scrub the area with detergent and water.

7. HANDLING AND STORAGE

1) Precautions for safe handling

- Handling refer to engineering control/personal protection section.
- Follow all MSDS/label precautions even after container is emptied because they may retain product residues.
- Please note that materials and conditions to be avoided.

2) Conditions for safe storage (including any incompatibilities)

- Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

1) Chemical exposure limits, Biological exposure standard

Components	Occupational exposure limits	ACGIH	Biological standard
Neopentyl glycol	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable

2) Appropriate engineering controls

- Not applicable

3) Personal protection equipment

- Respiratory protection
 - Wear breathing protection, which needs a confirmation from the Korea Occupational Safety and Health Agency.
 - If high frequency of use or exposure, wear air respirator.
- Eye protection
 - Wear suitable protective goggles and face shields.
- Hand protection
 - Wear suitable protective gloves.
- Body protection
 - Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White Flake (20°C, 1013 hPa)
Physical state	Solid
Colour	White
Odour	Sweet Odor
Odour threshold	(Not applicable)
pH	(Not applicable)
Melting point/freezing point	127~130 °C
Initial boiling point and boiling range	209°C
Flash point	103°C
Evaporation rate	(Not applicable)
Flammability(solid, gas)	Non flammable (Directive 84/449/EEC)
Upper/lower flammability or explosive limits	-11.4 / -1.1%
Vapour pressure	0.00024 hPa (20°C)
Solubility(ies)	830 g/L (20°C)
Vapour density	3.6
Relative density	1.07 g/cm ³
n-octanol/water partition coefficient	logKow = -0.15
Auto ignition temperature	399 °C
Decomposition temperature	Not Available
Viscosity	4.2mm ² /s
Molecular weight(mass)	104.1476 g/mol

10. STABILITY AND REACTIVITY

1) Stability and hazardous reactivity

- Containers may explode when heated.
- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Some may burn but none ignite readily.
- Fire may produce irritating, corrosive and/or toxic gases.

2) Conditions to avoid

- Ignition source(heat, spark, flame, etc.).

3) Incompatible materials

- Combustibles, reducing material.

4) Hazardous decomposition products

- Corrosive/toxic fume.
- Irritating, corrosive and/or toxic gas.
- During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

11. TOXICOLOGICAL INFORMATION

1) Exposure route information

- Inhalation
 - Not applicable
- Skin Contact
 - Not applicable
- Eye Contact
 - Causes serious eye damage
- Ingestion
 - Not applicable

2) Health hazard information

- Acute toxicity
 - Acute toxicity(Oral)
LD50 3200 mg / kg experimental species: Rat, Source: SIDS, IUCLID, THOMSON
 - Acute toxicity(Dermal)
LD50> 4000 mg / kg experimental species: Guinea pig, Source: IUCLID
 - Acute toxicity(Inhalation:Gases)
No data available
 - Acute toxicity(Inhalation:Vapours)
No data available

- Acute toxicity(Inhalation:Dust/mist)
 - No data available
- Skin corrosion/irritation
 - Rabbit - no irritation, Source: IUCLID
- Serious eye damage/eye irritation
 - Rabbit-stimulating, Source: IUCLID
- Respiratory sensitization
 - No data available
- Skin sensitization
 - Pigs (guinea pig) - no sensitizer, Source: IUCLID
- Carcinogenicity
 - No data available
- Germ cell mutagenicity
 - Ames test, Salmonella typhimurium - negative, Source: IUCLID
- Reproductive toxicity
 - No data available
- Specific target organ toxicity single exposure
 - Body - eyes, respiratory tract irritation, Source: IPCS
- Specific target organ toxicity repeated exposure
 - No data available
- Aspiration hazard
 - No data available

12. ECOLOGICAL INFORMATION

1) Aquatic toxicity

- Fish
 - LC50> 1000 mg / ℓ 96 hr *Oryzias latipes* (), Source: IUCLID
- Crustacea
 - LC50 3908.954 mg / ℓ 48 hr (), Source: ECOSAR
- Aquatic algae
 - EC50 2198.166 mg / ℓ 96 hr (), Source: ECOSAR

2) Persistence and degradation

- n-octanol water partition coefficient
 - 0.16 log Kow ()
- Degradation

No data available

- Biodegradation

(<5% (35 days))

3) Bioaccumulative potential

0.5 ~ 0.3 (fish 10 mg / L, 42 days)

4) Mobility in soil

No data available

5) Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

1) Disposal methods

- Every commercial waste producer shall either treat wastes generated from his/her place of business by him/herself or commission the treatment of such wastes to a person who has license for a waste treatment business under Article 26(3), a person who recycles of such wastes under Article 44(2), a person who has installed and operates a waste disposal facility under Article 4 or 5, a person who has completed the registration of a business of discharging wastes into the sea under Article 18 of the Marine Environment Management Act.

2) Precautions (including disposal of contaminated container of package)

- Do not allow spill material to enter sewers, storm water drains, soil, etc.

14. TRANSPORT INFORMATION

1) UN No. : Not applicable

2) Proper shipping name : Not applicable

3) Class or division : Not applicable

4) Packing group : Not applicable

5) Marine pollutant : Not applicable

6) Special safety response for transportation or transportation measure :

Emergency measures in case of fire : Not applicable

Emergency measures in the effluent : Not applicable

- ADR

· Tunnel restriction code : Not applicable

- IMDG

· Marine pollutant : Not applicable

- Air transport(IATA)

· UN No. : Not applicable

- Proper shipping name : Not applicable
- Class or division : Not applicable
- Packing group : Not applicable

15. REGULATORY INFORMATION

1) Occupational Safety and Health Act in Korea

- Not applicable

2) Toxic Chemical Control Act in Korea

- Not applicable

3) Safety Control of Dangerous Substances Act in Korea

- Not applicable

4) Wastes Control Act in Korea

- Designated waste (Not Applicable)

-In case of disposal, it must be disposed of in accordance with Article 13 of the Waste Management Act.

5) Other regulations in KOREA and Abroad regulations

- ETC regulation
 - Not applicable
 - Not applicable
- PERSISTENT ORGANIC POLLUTANTS CONTROL ACT
 - Not applicable
- Act on the registration and evaluation of chemicals
 - Existing Commercial Chemical Substances

16. OTHER INFORMATION

1) Reference

- ECOSAR
- IPCS
- IUCLID
- Ministry of Employment and Labor
- Ministry of Environment
- SIDS, IUCLID, THOMSON

2) Print date : 2022-04-14

3) Revision date

- Revised date count : 1
- Last revised date : 2022-05-11
- Last revised history : no changes

4) Other