

SAFETY DATA SHEET

Creation Date : 22. Feb. 2022

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

- Product Name : Cleaner-6

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Application of the substance / the mixture Solvents

1.3 Details of the supplier of the safety data sheet

- Company Name : Daedong Chemteck Co., Ltd
- Address : 478 Hanjanggun-ro, Jain, Gyung-san, Gyungbuk, Republic of Korea
- Company Contact : Customer Relations
 - Emergency Phone Number : +82-53-856-5698

Section 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance of mixture

- Classification according to Regulation (EC) No 1272/2008



GHS07

- Eye Irrit. 2 H319 Causes serious eye irritation.

- Information concerning particular hazards for human and environment:

- The product has to be labelled due to the calculation procedure of Regulation 1272/2008/EC.

- Classification system:

- The classification is according to the latest edition of EU Regulation 1272/2008/EC, and extended by company and literature data.

2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008

- The substance is classified and labelled according to Regulation (EC) No 1272/2008.

- Hazard pictograms



GHS07

- Signal word Warning

- Hazard-determining components of labelling: Not applicable

- Hazard statements

- H319 Causes serious eye irritation.

- Precautionary statements

- P280 Wear eye protection / face protection.
- P264 Wash thoroughly after handling.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable
- **vPvB:** Not applicable

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

- **CAS No. Description**
 - 108-32-7 propylene carbonate
- **Identification number(s)**
- **EC number:** 203-572-1
- **Index number:** 607-194-00-1

● Composition			
CAS : 108-32-7 EINCNS : 203-572-1 Index number : 607-194-00-1	Propylene carbonate	 Eye Irrit. 2, H319	99.5-99.99%
CAS : 7732-18-5 EINESC : 231-791-2	Water	-	0.002-0.05%

Section 4 - FIRST AID MEASURES

4.1 Description of first aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
 - Immediately wash with water and soap and rinse thoroughly.
 - If skin irritation continues, consult a doctor.
- **After eye contact:**
 - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
 - Rinse out mouth with water.
 - Never give anything by mouth to an unconscious person.
 - Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

- No further relevant information available

4.3 Indication of any immediate medical attention and special treatment needed

- No further relevant information available.

Section 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

- **Suitable extinguishing agents:**
 - Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture

- No further relevant information available.

5.3 Advice for firefighters

- **Protective equipment:**
 - Wear fully protective suit.

- Mouth respiratory protective device.

Section 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

- Wear protective equipment. Keep unprotected persons away.
- Ensure adequate ventilation.
- Use respiratory protective device against the effects of fumes/dust/aerosol.
- Avoid contact with eyes.
- Avoid contact with skin.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Dispose contaminated material as waste according to item 13.

6.4 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.

Section 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling

- Ensure good ventilation/exhaustion at the workplace.
- Keep receptacles tightly sealed.
- Keep away from heat and direct sunlight.
- Prevent formation of aerosols.
- Avoid contact with skin and eyes.
- For the general occupational hygienic measures refer to section 8.
- **Information about fire - and explosion protection:** Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities:

- **Requirements to be met by storerooms and receptacles:**
 - Store in a cool location.
 - Store only in the original receptacle.
- **Information about storage in one common storage facility:**
 - Store away from foodstuffs.
 - Do not store together with acidic materials.
 - Do not store together with alkaline materials.
- **Further information about storage conditions:**
 - Keep container tightly sealed.
 - Store in cool, dry conditions in well sealed receptacles.

7.3 Specific end use(s) No further relevant information available

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **DNELs:** Data not available
- **PNECs:** Data not available

- **Additional information:** The lists valid during the making were used as basis.

8.2 Exposure controls

- **Based on composition shown in Section 3, the following measures are suggested for occupational safety measure:**
- **Appropriate engineering controls:**
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work.
 - Avoid contact with the eyes and skin.
 - See Section 7 for information about design of technical facilities.
- **Personal protective equipment:**
- **Respiratory protection:** Suitable respiratory protective device recommended.
- **Protection of hands:**



Protective gloves

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **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:**



Tightly sealed goggles

- **Environmental exposure controls:**
 - Control measures must be made in accordance with Community environmental protection legislation.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- **Appearance:**
 - **Form** Liquid
 - **Colour** Colourless
 - **Odour** Weak odor
 - **Odour threshold:** Data not available
 - **pH-value (50 g/l) at 20 °C:** 5,6
 - **Change in condition**
 - Melting point/freezing point:** -48,8 °C
 - Initial boiling point and boiling range:** 230 °C
 - **Freezing point:** Data not available

· Flash point:	132 °C
· Flammability (solid, gas):	Not applicable
· Auto-Ignition temperature:	Data not available
· Decomposition temperature:	>350 °C
· Self-igniting:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Data not available
Upper:	Data not available
· Oxidising properties	Data not available
· Vapour pressure at 20 °C:	0,004 Kpa
· Density at 20 °C:	1,189 g/cm ³
· Relative density	1,2047 (Water=1)
· Vapour density	Data not available
· Evaporation rate	Data not available
· Solubility in / Miscibility with water:	Slightly soluble.
· Partition coefficient: n-octanol/water:	0,23 log POW
· Viscosity:	
Dynamic at 20 °C:	2,5 mPas
Kinematic:	Data not available

9.2 Other information

Relative vapour density (Air =1): Data not available
The product can dissolve with any organic solvent.

Section 10 - STABILITY AND REACTIVITY

- **10.1 Reactivity** No decomposition if used according to specification.
- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

Section 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

- Acute toxicity Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification :
 - 108-32-7 propylene carbonate
Oral LD50 29000 mg/kg (rat)
- **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation:** Causes serious eye irritation.
- **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

Section 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

- **Aquatic toxicity:** No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

12.6 Other adverse effects No further relevant information available.

12.6 Additional ecological information:

- **General notes:**
 - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
 - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Section 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

- **Recommendation**
 - Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations

Section 14 - TRANSPORT INFORMATION

14.1 UN-Number

- ADR,RID,ADN, IMDG, IATA Not applicable

14.2 UN proper shipping name

- ADR,RID,ADN, IMDG, IATA Not applicable

14.3 Transport hazard class(es)

- ADR,RID,ADN, IMDG, IATA
- Class Not applicable

14.4 Packing group

- ADR,RID,ADN, IMDG, IATA Not applicable

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

14.8 Transport/Additional information:

Not dangerous according to the above specifications.

- UN "Model Regulation":

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Section 15 - REGULATORY INFORMATION

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

- MAK (German Maximum Workplace Concentration)
 - Substance is not listed.
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I Substance is not listed.
- National regulations:
- Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- Other regulations, limitations and prohibitive regulations
 - SVHC Candidate List of REACH Regulation Annex XIV Authorisation (12/1/2017)
Substance is not listed.
 - REACH Regulation Annex XVII Restriction (3/2/2017) See
Section 16 for information about restriction of use.
Substance is not listed.
 - REACH Regulation Annex XIV Authorization List (14/8/2014)
Substance is not listed.

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

Section 16 - OTHER INFORMATION

- Where to make contact : Please refer to "Section 1" in detail.
- Relevant hazard statements
 - H319 Causes serious eye irritation.

The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, 1272/2008 and Regulation (EU) No 2015/830.

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● Abbreviations and acronyms:

- 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
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals

- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

NOTICE : This MSDS was made out as English translated version of the MSDS based on the Korea laws and regulations. Therefore, it was not applicable to the domestic distribution in the importing country.
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