

## CONSTANT GLY 2100

Version	Revision Date:	Date of last issue: 13.01.2020	Print Date:
3.3	13.07.2020	Date of first issue: 27.06.2014	13.07.2020

### SECTION 1: Identification of the hazardous chemical and of the supplier

#### Product identifier

Product name : CONSTANT GLY 2100

Article-No. : 028049

#### Recommended use of the chemical and restrictions on use

Recommended use : Lubricating oil

Restrictions on use : Restricted to professional users.

#### Manufacturer or supplier's details

Company : Klüber Lubrication München  
Geisenhausenerstr. 7  
81379 München  
Deutschland  
Tel: +49 (0) 89 7876 0  
Fax: +49 (0) 89 7876 333  
info@klueber.com

E-mail address of person responsible for the SDS : mcm@klueber.com  
Material Compliance Management

National contact : Klüber Lubrication (Malaysia) Sdn. Bhd.  
No 3-5, Level 3 Tower 9  
UOA Business Park  
No. 1 Jalan Pengaturcara U1/51A  
40150 Shah Alam, Selangor  
Malaysia  
Tel: +603-5569 9990  
Fax: +603-5569 7990  
E-Mail: sales@my.klueber.com  
www.klueber.com

Emergency telephone number : +49 89 7876 700 (24 hrs)

### SECTION 2: Hazards identification

#### Classification according to Regulation (EC) No. 1907/2006

Not a hazardous substance or mixture.

#### Label according to Regulation (EC) No. 1907/2006

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**Other hazards which do not result in classification** None known.

### SECTION 3: Composition and information of the ingredients of the hazardous chemical

Substance / Mixture : Mixture

Chemical nature : Synthetic hydrocarbon oil  
lithium soap

#### Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
lithium 12-hydroxystearate	7620-77-1	>= 1 -< 3
N-alkylated benzotriazole	94270-86-7	>= 0.25 -< 1

### SECTION 4: First aid measures

If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.  
Keep patient warm and at rest.  
If unconscious, place in recovery position and seek medical advice.  
Keep respiratory tract clear.  
If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.  
In case of contact, immediately flush skin with plenty of water.  
Wash clothing before reuse.  
Thoroughly clean shoes before reuse.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.  
If eye irritation persists, consult a specialist.

If swallowed : Move the victim to fresh air.  
If unconscious, place in recovery position and seek medical advice.  
Keep respiratory tract clear.  
Do NOT induce vomiting.  
Rinse mouth with water.  
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed : No information available. None known.

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Notes to physician : No information available.

### SECTION 5: Firefighting measures

#### Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

#### Physicochemical hazards arising from the chemical

Specific hazards during fire-fighting : Fire may cause evolution of:  
Carbon oxides  
Metal oxides  
Nitrogen oxides (NOx)

#### Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.  
Exposure to decomposition products may be a hazard to health.

Specific extinguishing methods : Standard procedure for chemical fires.

### SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.  
Use personal protective equipment.  
Ensure adequate ventilation.  
Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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### SECTION 7: Handling and storage

#### Handling

##### Precautions for safe handling

Advice on safe handling : Avoid inhalation of vapour or mist.  
 Avoid contact with skin and eyes.  
 For personal protection see section 8.  
 Smoking, eating and drinking should be prohibited in the application area.  
 Wash hands and face before breaks and immediately after handling the product.  
 Do not ingest.  
 Do not repack.  
 Do not re-use empty containers.  
 These safety instructions also apply to empty packaging which may still contain product residues.  
 Keep container closed when not in use.

#### Storage

##### Conditions for safe storage, including any incompatibilities

Conditions for safe storage : Store in original container.  
 Keep container closed when not in use.  
 Keep in a dry, cool and well-ventilated place.  
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
 Store in accordance with the particular national regulations.  
 Keep in properly labelled containers.

### SECTION 8: Exposure controls and personal protection

#### Control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
lithium 12-hydroxystearate	7620-77-1	TWA	10 mg/m <sup>3</sup>	MY PEL
		TWA (Inhalable particulate matter)	10 mg/m <sup>3</sup>	ACGIH
		TWA (Respirable particulate matter)	3 mg/m <sup>3</sup>	ACGIH

Appropriate engineering controls : none

##### Individual protection measures, such as personal protective equipment

Eye/face protection : Safety glasses with side-shields

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Hand protection  
 Material : Nitrile rubber  
 Break through time : > 10 min  
 Protective index : Class 1

Remarks : Wear protective gloves. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.

Respiratory protection : Not required; except in case of aerosol formation.

Filter type : Filter type A-P

Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.

### SECTION 9: Physical and chemical properties

Appearance : liquid

Colour : brown

Odour : characteristic

Odour Threshold : No data available

pH : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point :  $\geq 180$  °C  
 Method: ISO 2592, open cup

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Self-ignition : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : < 0.001 hPa (20 °C)

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Relative vapour density : No data available

Density : 0.83 g/cm<sup>3</sup> (20 °C)

Bulk density : No data available

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : 300 - 450 mPa.s ( 20 °C)

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : No data available

Sublimation point : No data available

### SECTION 10: Stability and reactivity

Reactivity : No hazards to be specially mentioned.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : No conditions to be specially mentioned.

Incompatible materials : No materials to be especially mentioned.

Hazardous decomposition products : No decomposition if stored and applied as directed.

### SECTION 11: Toxicological information

Information on likely routes of exposure : None known.

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### Acute toxicity

#### Product:

Acute oral toxicity : Remarks: This information is not available.  
Acute inhalation toxicity : Remarks: This information is not available.  
Acute dermal toxicity : Remarks: This information is not available.

#### Components:

##### **lithium 12-hydroxystearate:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Method: OECD Test Guideline 401  
Acute dermal toxicity : LD50 (Rabbit): > 3,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

##### **N-alkylated benzotriazole:**

Acute oral toxicity : LD50 (Rat): 3,313 mg/kg  
Method: OECD Test Guideline 401  
Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
Assessment: The substance or mixture has no acute dermal toxicity

### Skin corrosion/irritation

#### Product:

Remarks : This information is not available.

#### Components:

##### **lithium 12-hydroxystearate:**

Assessment : No skin irritation  
Method : OECD Test Guideline 439  
Result : No skin irritation

##### **N-alkylated benzotriazole:**

Species : Rabbit  
Assessment : Irritating to skin.  
Method : Draize Test  
Result : Irritating to skin.

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### Serious eye damage/eye irritation

**Product:**

Remarks : This information is not available.

**Components:**

**lithium 12-hydroxystearate:**

Species : Rabbit  
Result : No eye irritation  
Assessment : No eye irritation  
Method : OECD Test Guideline 405

**N-alkylated benzotriazole:**

Species : Rabbit  
Result : No eye irritation  
Assessment : No eye irritation  
Method : Draize Test

### Respiratory or skin sensitisation

**Product:**

Remarks : This information is not available.

**Components:**

**lithium 12-hydroxystearate:**

Exposure routes : Dermal  
Species : Mouse  
Method : OECD Test Guideline 429  
Result : negative

**N-alkylated benzotriazole:**

Test Type : Maximisation Test  
Species : Guinea pig  
Assessment : The product is a skin sensitiser, sub-category 1B.  
Method : OECD Test Guideline 406  
Result : The product is a skin sensitiser, sub-category 1B.

### Germ cell mutagenicity

**Product:**

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available



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### Components:

#### **N-alkylated benzotriazole:**

Genotoxicity in vitro : Test Type: Ames test  
Method: OECD Test Guideline 471  
Result: negative

Germ cell mutagenicity - Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

### **Carcinogenicity**

#### Product:

Remarks : No data available

### Components:

#### **N-alkylated benzotriazole:**

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

### **Reproductive toxicity**

#### Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

### Components:

#### **N-alkylated benzotriazole:**

Effects on fertility : Species: Rat  
Application Route: Oral  
General Toxicity - Parent: NOAEL: 45 mg/kg body weight  
General Toxicity F1: NOAEL: 45 mg/kg body weight  
Fertility: NOAEL: 150 mg/kg body weight  
Method: OECD Test Guideline 422

Effects on foetal development : Species: Rat  
Application Route: Oral  
Duration of Single Treatment: 28 h  
General Toxicity Maternal: NOAEL: 45 mg/kg body weight  
Developmental Toxicity: NOAEL: 45 mg/kg body weight  
Method: OECD Test Guideline 422

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.  
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### STOT - single exposure

#### Components:

##### **N-alkylated benzotriazole:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

### STOT - repeated exposure

#### Components:

##### **N-alkylated benzotriazole:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

### Repeated dose toxicity

#### Product:

Remarks : This information is not available.

#### Components:

##### **N-alkylated benzotriazole:**

Species : Rat  
NOAEL : 45 mg/kg  
Application Route : Oral  
Exposure time : 28  
Method : OECD Test Guideline 422

### Aspiration toxicity

#### Product:

This information is not available.

#### Components:

##### **N-alkylated benzotriazole:**

No aspiration toxicity classification

### Further information

#### Product:

Remarks : Information given is based on data on the components and the toxicology of similar products.

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**SECTION 12: Ecological information**

**Ecotoxicity**

**Product:**

Toxicity to fish : Remarks: Harmful to aquatic organisms.

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

**Components:**

**lithium 12-hydroxystearate:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Method: OECD Test Guideline 203  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): > 160 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 160 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

**N-alkylated benzotriazole:**

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 1.3 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.05 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 0.762 mg/l

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Exposure time: 72 h  
Test Type: static test  
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to microorganisms : EC20 (activated sludge): 15 mg/l  
Exposure time: 3 h  
Test Type: Respiration inhibition  
Method: OECD Test Guideline 209

**Ecotoxicology Assessment**

**N-alkylated benzotriazole:**

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**Persistence and degradability**

**Product:**

Biodegradability : Remarks: No data available

Physico-chemical removability : Remarks: No data available

**Components:**

**lithium 12-hydroxystearate:**

Biodegradability : Primary biodegradation  
Inoculum: activated sludge  
Result: rapidly biodegradable  
Biodegradation: 74.7 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301C

**N-alkylated benzotriazole:**

Biodegradability : Primary biodegradation  
Inoculum: activated sludge  
Result: Not rapidly biodegradable  
Biodegradation: < 10 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

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### Bioaccumulative potential

#### Product:

Bioaccumulation : Remarks: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).  
This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

#### Components:

##### **lithium 12-hydroxystearate:**

Partition coefficient: n-octanol/water : log Pow: 2.6

##### **N-alkylated benzotriazole:**

Bioaccumulation : Bioconcentration factor (BCF): 1,676

Partition coefficient: n-octanol/water : Remarks: Not applicable

### Mobility in soil

#### Product:

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: No data available

### Other adverse effects

#### Product:

Additional ecological information : No information on ecology is available.

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## SECTION 13: Disposal information

### Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.  
Do not dispose of with domestic refuse.  
Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as the unused product.  
Dispose of waste product or used containers according to local regulations.

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### SECTION 14: Transport information

#### International Regulations

##### UNRTDG

Not regulated as a dangerous good

##### IATA-DGR

Not regulated as a dangerous good

##### IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

### SECTION 15: Regulatory information

#### Safety, health, and environmental regulations specific for the hazardous chemical

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013.

Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

### SECTION 16: Other information

Date format : dd.mm.yyyy

#### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
MY PEL : Malaysia. Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

ACGIH / TWA : 8-hour, time-weighted average  
MY PEL / TWA : Eight-hour time-weighted average airborne concentration

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and 14 /

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Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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