

SYNTHESO GLEP 1

VersionRevision Date:Date of last issue: 22.02.2021Print Date:2.725.08.2021Date of first issue: 25.04.201625.08.2021

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : SYNTHESO GLEP 1

Article-No. : 012142

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 : mcm@klueber.com

responsible for the SDS Material Compliance Management

National contact : Klüber Lubrication India Private Limited

347-A, Hebbal Industrial Area,

P.O. Metagalli Mysore 570 016

India

Tel.: +91 821 6647 041 Fax: +91 821 2402 825 customercare@in.klueber.com

Emergency telephone number : +91 821 6647 041 (9:30 am - 6:00 pm, daily except sunday)

+49 89 7876 700 (24 hrs)

Recommended use of the chemical and restrictions on use

Recommended use : Grease

Restrictions on use : Restricted to professional users.

2. HAZARDS IDENTIFICATION

Manufacture, Storage and Import of Hazardous Chemicals Rules 1989

Classification

GHS Classification

Skin sensitisation : Category 1

GHS label elements



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Hazard pictograms

(!)

Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.

Precautionary statements : Prevention:

P272 Contaminated work clothing should not be allowed out of

the workplace.

P280 Wear protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.

P333 + P313 If skin irritation or rash occurs: Get medical ad-

vice/ attention.

P362 + P364 Take off contaminated clothing and wash it before

reuse.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : polyalkylene glycol oil

special lithium soap

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
lithium 12-hydroxystearate	7620-77-1	>= 1 - < 10
dilithium azelate	38900-29-7	>= 1 - < 10
Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol	Not Assigned	>= 1 - < 10
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1	>= 1 - < 2.5

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 respira-

tion.



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In case of skin contact : Take off all contaminated clothing immediately.

Wash off immediately with soap and plenty of water. Get medical attention immediately if irritation develops and

persists.

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 without medical advice.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and

delayed

May cause an allergic skin reaction.

Allergic appearance

Notes to physician : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or car-

bon dioxide.

Unsuitable extinguishing

media

High volume water jet

Hazardous combustion prod-

ucts

Carbon oxides

Nitrogen oxides (NOx)

Sulphur oxides

Oxides of phosphorus

Metal oxides

Specific extinguishing meth-

ods

Standard procedure for chemical fires.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

Evacuate personnel to safe areas.

Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release

(dust).





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Do not breathe vapours, aerosols.

Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Try to prevent the material from entering drains or water

courses.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for

containment and cleaning up

Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Advice on safe handling : Avoid contact with skin and eyes.

For personal protection see section 8.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Wash hands and face before breaks and immediately after

handling the product.

Do not get in eyes or mouth or on skin.

Do not get on skin or clothing.

Do not ingest. Do not repack.

These safety instructions also apply to empty packaging which

may still contain product residues. Keep container closed when not in use.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
lithium 12-hydroxystearate	7620-77-1	TWA (Inhal- able particu- late matter)	10 mg/m3	ACGIH
		TWA (Respirable particulate matter)	3 mg/m3	ACGIH



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Engineering measures : none

Personal protective equipment

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

Filter type : Filter type P

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.

Eye protection : Safety glasses with side-shields

Protective measures : The type of protective equipment must be selected according

to the concentration and amount of the dangerous substance

at the specific workplace.

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the spe-

cific work-place.

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

handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : paste

Colour : beige

Odour : characteristic

Odour Threshold : No data available

pH : Not applicable

substance/mixture is non-soluble (in water)

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : Combustible Solids



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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)

Relative vapour density : No data available

Relative density : 0.97 (20 °C)

Reference substance: Water The value is calculated

Density : 0.97 g/cm3 (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 : No data available

Viscosity, kinematic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : No data available

Sublimation point : No data available

10. STABILITY AND REACTIVITY

Reactivity : No hazards to be specially mentioned.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

No dangerous reaction known under conditions of normal use.

Conditions to avoid : No conditions to be specially mentioned.



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Incompatible materials : No materials to be especially mentioned.

Hazardous decomposition

products

: No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

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

Acute dermal toxicity : Symptoms: Redness, Local irritation

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

dilithium azelate:

Acute oral toxicity : LD50 (Rat): > 300 mg/kg

Method: OECD Test Guideline 420

GLP: yes

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

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

Method: OECD Test Guideline 425

Assessment: The substance or mixture has no acute oral tox-

icity

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401



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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

dilithium azelate:

Assessment : No skin irritation

Result : No skin irritation

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Species : reconstructed human epidermis (RhE)

Assessment : No skin irritation

Result : No skin irritation

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Rabbit

Assessment : No skin irritation

Result : No skin irritation

Serious eye damage/eye irritation

Product:

Remarks : This information is not available.

Components:

lithium 12-hydroxystearate:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

dilithium azelate:

Species : Rabbit





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Assessment No eye irritation Result No eye irritation

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Species Rabbit

Assessment No eye irritation Result No eye irritation

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species Rabbit

Assessment No eye irritation Result No eye irritation

Respiratory or skin sensitisation

Product:

This information is not available. Remarks

Components:

lithium 12-hydroxystearate:

Exposure routes Dermal **Species** Mouse

Method **OECD Test Guideline 429**

Result negative

dilithium azelate:

Assessment Does not cause skin sensitisation. Does not cause skin sensitisation. Result

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Assessment May cause sensitisation by skin contact. Result May cause sensitisation by skin contact.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species Guinea pig

Does not cause skin sensitisation. Assessment **OECD Test Guideline 406** Method

Result Does not cause skin sensitisation.

Germ cell mutagenicity

Product:

Genotoxicity in vitro Remarks: No data available

Genotoxicity in vivo Remarks: No data available



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Components:

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Genotoxicity in vitro : Remarks: In vitro tests did not show mutagenic effects

Carcinogenicity

Product:

Remarks : No data available

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

: Remarks: No data available

Components:

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Reproductive toxicity - As-

sessment

: - Fertility -

Animal testing did not show any effects on fertility.

STOT - single exposure

Components:

dilithium azelate:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

STOT - repeated exposure

Components:

dilithium azelate:

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.

Aspiration toxicity

Product:

This information is not available.



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Components:

dilithium azelate:

No aspiration toxicity classification

Further information

Product:

Remarks : Information given is based on data on the components and

the toxicology of similar products.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish

Remarks: No data available

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

dilithium azelate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h



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Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 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)): 51 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

Ecotoxicology Assessment

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Physico-chemical removabil- :

ity

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

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Biodegradability : Result: Not rapidly biodegradable

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Biodegradability : aerobic



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Inoculum: activated sludge Result: Not rapidly biodegradable

Biodegradation: 1 % Exposure time: 28 d

Method: OECD Test Guideline 301B

GLP: yes

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

dilithium azelate:

Bioaccumulation : Bioconcentration factor (BCF): 3.0

Partition coefficient: n-

octanol/water

log Pow: -3.56

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Bioaccumulation : Bioconcentration factor (BCF): < 100

Partition coefficient: n-

octanol/water

log Pow: 9.01

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Bioaccumulation : Bioconcentration factor (BCF): 1,730

Partition coefficient: n- : log Pow: 6.66 (23 °C)

octanol/water pH: 6.67

Method: OECD Test Guideline 123

GLP: yes

Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among environ-

mental compartments

Remarks: No data available



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Other adverse effects

Product:

Additional ecological infor-

mation

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

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.

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.

15. REGULATORY INFORMATION

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

16. OTHER INFORMATION

Date format : dd.mm.yyyy

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)



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ACGIH / TWA : 8-hour, time-weighted average

AIIC - Australian Inventory of Industrial Chemicals; 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 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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