



SYNTHESO GLK 1

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

1.1. Product identifier

Trade name

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Article No.

A011A675.Z, 32932966.Z, 32932967.Z, PFG110Z, A008N369Z, PFG110, 32932966, 32932967

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

Product type

Mixture.

Relevant identified uses

Grease.

Not suitable for use in

Restricted to professional users.

1.3. Details of the supplier of the safety data sheet

SDS created by

Global Division B Product Compliance Mgmt. System (BWC)

Supplier

ZF Services, LLC

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Available outside office hours

Yes



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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification

Skin sensitisation, hazard category 1, sub-category 1A

Hazard statements

H317

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Warning

Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of water/.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards

None known.



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SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Specific concentration limits ATE	Note
Dilithium azelate	38900-29-7 254-184-4 01-2120119814-57-0000 -	≥1 - <5%	Acute Tox. 4 - oral	H302 - -		-
4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol	68140-98-7 268-820-3 - -	≥1 - <5%	Skin Sens. 1A	H317 - -		-

Product based on

polyalkylene glycol oil
special lithium soap

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove victim to fresh air. If signs/symptoms persist, get medical attention. Keep victim warm and at rest. If breathing is irregular or stops, give artificial respiration. If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water.
Get medical attention immediately!
Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact

Immediately rinse with plenty of water for at least 10 minutes, also under the eyelids. If eye irritation persists, seek medical attention.



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Ingestion

Move the victim to fresh air.

Do not induce vomiting without medical advice. If unconscious, place in recovery position and seek medical advice.

Keep respiratory tract clear.

Rinse mouth with water.

Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

No symptoms known or expected.

Skin contact

May cause an allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Water spray.

Unsuitable extinguishing media

Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Carbon monoxide (CO).

Carbon dioxide (CO₂).

nitrogen oxides

Metal oxides.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

In case of fire, wear self-contained breathing apparatus. Use personal protective equipment. Inhalation of decomposition products can be harmful to health.

Other

Standard procedure for chemical fires.



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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area.
Provide adequate ventilation.
Do not breathe vapours. Avoid inhalation of aerosols.
See section 7. & 8.

6.2. Environmental precautions

Prevent material from entering drains or water courses. If large spills cannot be contained, local authorities should be notified.

6.3. Methods and material for containment and cleaning up

Collect and place in appropriately labelled containers.

6.4. Reference to other sections

For personal protection, see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Avoid contact with skin and eyes.
For personal protection, see section 8.
Wash hands and face before breaks and immediately after handling the product.
Do not get in eyes, on skin, or on clothing.
Do not repack.
These safety instructions also apply to empty packaging which may still contain product residues.
Keep container closed when not in use.

General hygiene

Wash face, hands and all exposed skin thoroughly after use.

7.2. Conditions for safe storage, including any incompatibilities

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.

7.3. Specific end use(s)

Not required.



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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits

Occupational exposure limits: See below OEL table.

Biological Limit Values (BLV): No exposure limit value known.

National occupational exposure limits

Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m ³	Source	Remark	Year
lithium 12-hydroxystearate	7620-77-1 -	- / 10 /	CA AB OEL (2009-04-30)	TWA	2009
lithium 12-hydroxystearate	- -	- / 10 /	CA QC OEL (2020-03-11)	VEMP	2020
lithium 12-hydroxystearate	- -	- / 10 /	CA BC OEL (2021-01-04)	TWA (Inhalable)	2021
lithium 12-hydroxystearate	- -	- / 3 /	CA BC OEL (2021-01-04)	TWA (Respirable)	2021
lithium 12-hydroxystearate	- -	- / 10 /	ACGIH (2018- 03-20)	TWA (Fraction inhal- able)	2018
lithium 12-hydroxystearate	- -	- / 3 /	ACGIH (2018- 03-20)	TWA (Fraction respir- able)	2018

8.2. Exposure controls

Appropriate engineering controls

None.

protective measures: The type of protective equipment must be selected depending on the concentration and quantity of the hazardous substance in the workplace.

Personal Protective Equipment Symbols



Eye / face protection

Safety glasses.

Hand protection

Material: nitrile rubber.

Breakthrough time: > 10 min

Class: Protective index: 1

Wear protective gloves. For prolonged or repeated contact use 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.



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Other skin protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Respiratory protection

Not required; except in case of aerosol formation.

Filter type: P

Environmental exposure controls

Air. : Not required.

Soil & Water. : The product should not be allowed to enter drains, water courses or the soil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Solid. [Paste.]

Colour

Beige.

Odour

Characteristic.

Melting point / freezing point

No data available

Boiling point or initial boiling point and boiling range

No data available

Flammability

Flammability (solid, gas): Combustible solids.

Lower and upper explosion limit

No data available

Flash point

Not applicable.

Auto-ignition temperature

No data available

Decomposition temperature

No data available



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pH

Not applicable. Product is non-soluble (in water).

Kinematic viscosity

Not applicable.

Solubility

No data available

Water solubility

Insoluble in water.

Partition coefficient n-octanol/water

No data available

Vapour pressure

< 0.001 hPa (20 °C)

Density and/or relative density

0.97 g/cm³ (20 °C)

Relative density

0.97 (20 °C)

Reference substance: water

The value is calculated.

Relative vapour density

No data available

Explosive properties

Not explosive

Particle characteristics

Not applicable.

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No specific recommendations.

10.2. Chemical stability

Stable under normal use conditions.



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10.3. Possibility of hazardous reactions

No dangerous reactions known when used as directed.

10.4. Conditions to avoid

No specific recommendations.

10.5. Incompatible materials

No materials to be especially mentioned.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix: (Oral.): > 2,000 mg/kg [Calculation method.]

Product / Sub- stance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Test animals	Method / Guideline	Remarks
Dilithium azelate -	LD50	> 300 mg/kg	Oral.	Rat.	OECD Test Guideline 420	GLP: yes
Dilithium azelate -	LD50	> 2,000 mg/kg	-	Rabbit	-	The substance or mixture has no acute dermal toxicity
4-ethyl-2-(8- heptadecenyl)-2- oxazoline-4- methanol -	LD50	> 2,000 mg/kg	Oral.	Rat.	OECD Test Guideline 423	GLP: yes

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product / Substance name CAS / EC no.	Result	Species
4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol -	Not irritating.	Human Skin.



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Product / Substance name CAS / EC no.	Result	Species
Dilithium azelate -	Not irritating.	-

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Product / Substance name CAS / EC no.	Result	Species
4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol -	Not irritating.	Rabbit
Dilithium azelate -	Not irritating.	Rabbit

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Product / Substance name CAS / EC no.	Result
4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol -	Skin Sens. 1A;H317
Dilithium azelate -	Not sensitising.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Repeated dose toxicity

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.



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Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Other information

The information provided is based on data from the components and toxicity of similar products.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Based on available data, the classification criteria are not met.

Acute fish toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
Dilithium azelate -	LC50	> 100 mg/l	96 hr	Oncorhynchus mykiss

Acute algae toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline	Remark
4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol -	EC50	65.6 mg/l	72 hr	Desmodesmus subspicatus	OECD Test Guideline 201	GLP: yes

Acute crustacean toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline	Remark
4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol	EC50	69.17 mg/l	48 hr	Daphnia magna	OECD Test Guideline 202	Test Type: static test



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Product / Sub- stance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline	Remark
-						
Dilithium azelate -	EC50	> 100 mg/l	48 hr	Daphnia magna	-	-

Chronical toxicity

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

No data available.

Product / Substance name CAS / EC no.	Result	Degradation	Method / Guideline
4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol -	Not readily biodegradable.	34.73 %	OECD Test Guideline 301B

12.3. Bioaccumulative potential

Product / Substance name CAS / EC no.	LogKow / LogPow	Bioconcentration factor (BCF)
Dilithium azelate -	log Pow: -3.56	3
4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol -	log Pow: 3.42 (68 °F / 20 °C)	-

12.4. Mobility in soil

Mobility

No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available



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Other

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

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.

Waste codes should be assigned by the user based on the application for which the product was used.

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.

The following Waste Codes are only suggestions:

SECTION 14: Transport information

14.1. UN number

Not regulated.

14.2. UN proper shipping name

ADR / RID / ADN proper shipping name

Not regulated.

14.3. Transport hazard class(es)

Label

Not regulated.

ADR / RID Class

Not regulated.

IMDG Class

Not regulated.

IATA Class

Not regulated.

ADN Class

Not regulated.



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14.4. Packing group

Not regulated.

14.5. Environmental hazards

Not regulated.

IMDG Marine Pollutant

Not regulated.

14.6. Special precautions for user

Not regulated.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

Other

TDG: Not regulated.

SECTION 15: Regulatory information

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

EU regulations

Not Applicable.

National regulations

Canadian lists: No substances are subject to a Significant New Activity Notification.

15.2. Chemical safety assessment

Not available.

SECTION 16: Other information

Phrase meaning

Skin Sens. 1A - Skin sensitisation, hazard category 1, sub-category 1A

Acute Tox. 4 - oral - Acute toxicity, oral, hazard category 4

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.



SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006

Version number: 1

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Other

Additional information

Disclaimer : The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.