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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 23.08.2019 / 0003
Replacing version dated / version: 01.06.2019 / 0002
Valid from: 23.08.2019
PDF print date: 26.08.2019
Brake Pin 5 g
Art.: 21119

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

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

Relevant identified uses of the substance or mixture:

Lubricating grease

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

GB

LIQUI MOLY GmbH, Jerg-Wieland-Str. 4, 89081 Ulm-Lehr, Germany
Phone: (+49) 0731-1420-0, Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
Skin Sens.	1	H317-May cause an allergic skin reaction.

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)



Warning

H317-May cause an allergic skin reaction.

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P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.
P261-Avoid breathing vapours or spray. P280-Wear protective gloves.
P333+P313-If skin irritation or rash occurs: Get medical advice / attention.
P501-Dispose of contents / container to an approved waste disposal facility.

Di-iso-octyl amino methyl tolutriazole
Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a.

3.2 Mixture

Dilithium azelate	
Registration number (REACH)	01-2120119814-57-XXXX
Index	---
EINECS, ELINCS, NLP	254-184-4
CAS	38900-29-7
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 4, H302
Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol	
Registration number (REACH)	01-2120770934-44-XXXX
Index	---
EINECS, ELINCS, NLP	946-010-7
CAS	---
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Sens. 1B, H317
Di-iso-octyl amino methyl tolutriazole	
Registration number (REACH)	01-2119982395-25-XXXX
Index	---
EINECS, ELINCS, NLP	939-700-4 (REACH-IT List-No.)
CAS	---
content %	0,1-<0,25
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!

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Never pour anything into the mouth of an unconscious person!

Inhalation

Supply person with fresh air and consult doctor according to symptoms.
Respiratory arrest - Artificial respiration apparatus necessary.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Allergic reaction possible.

Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water.

Consult medical specialist.

Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

Allergic reaction possible.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water jet spray/foam/CO2/dry extinguisher

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Metal oxides

Oxides of nitrogen

Toxic gases

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary.

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air.

Do not breathe vapours or spray.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping.

6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Pick up mechanically and dispose of according to Section 13.

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Fill the absorbed material into lockable containers.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Avoid contact with eyes or skin.

No contact with products of this type in case of allergies, asthma und chronic respiratory tract disorders.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Store in a well ventilated place.

Store cool.

Store in a dry place.

Store upright.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Di-iso-octyl amino methyl tolutriazole						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,000976	mg/l	
	Environment - marine		PNEC	0,000098	mg/l	
	Environment - sporadic (intermittent) release		PNEC	0,00976	mg/l	
	Environment - sewage treatment plant		PNEC	0,69	mg/l	
	Environment - sediment, freshwater		PNEC	0,0121	mg/kg	
	Environment - sediment, marine		PNEC	0,00121	mg/kg	
	Environment - soil		PNEC	0,00184	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,2	mg/kg	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,2	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,3	mg/m3	

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Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	1,3	mg/m ³	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,4	mg/kg	

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
 If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
 Applies only if maximum permissible exposure values are listed here.

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
 Wash hands before breaks and at end of work.
 Keep away from food, drink and animal feedingstuffs.
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
 Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:
 Protective nitrile gloves (EN 374).
 Minimum layer thickness in mm:
 0,5
 Permeation time (penetration time) in minutes:
 > 30
 Protective hand cream recommended.
 The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.
 The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:
 Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
 If air supply is not sufficient, wear protective breathing apparatus.
 Filter P2 (EN 143), code colour white
 Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
 Not applicable

Additional information on hand protection - No tests have been performed.
 In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
 Selection of materials derived from glove manufacturer's indications.
 Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
 Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
 In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
 The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Paste, solid.
Colour:	Beige
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	Not determined

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Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	n.a.
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	<0,001 hPa (20°C)
Vapour density (air = 1):	Not determined
Density:	~0,97 g/cm ³ (20°C)
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Product is not explosive.
Oxidising properties:	Not determined

9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

Not to be expected

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

None known

10.5 Incompatible materials

None known

10.6 Hazardous decomposition products

No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.

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Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Di-iso-octyl amino methyl tolutriazole						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	3313	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	(Draize-Test)	Skin Irrit. 2
Serious eye damage/irritation:				Rabbit	(Draize-Test)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Skin Sens. 1B
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Other adverse effects:							n.d.a.

Di-iso-octyl amino methyl tolutriazole							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	1,3	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	2,05	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	0,976	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	0,658	mg/l	Desmodesmus subspicatus		
12.2. Persistence and degradability:		28d	<10	%	activated sludge	OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Not readily biodegradable CO2 formation of the theoretical value

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

07 06 99 wastes not otherwise specified

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

Do not dispose of with household waste.

For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

14.1. UN number: n.a.

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

Classification code: n.a.

Hazard identification number: n.a.

LQ: n.a.

14.5. Environmental hazards: Not applicable

Tunnel restriction code:

Transport by sea (IMDG-code)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

Marine Pollutant: n.a.

14.5. Environmental hazards: Not applicable

Transport by air (IATA)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

14.5. Environmental hazards: Not applicable

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

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

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

Observe restrictions:

Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)!

Comply with trade association/occupational health regulations.

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Directive 2010/75/EU (VOC): 2,03 %

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 2, 3, 5
 These details refer to the product as it is delivered.
 Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Skin Sens. 1, H317	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H317 May cause an allergic skin reaction.
 H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H400 Very toxic to aquatic life.
 H411 Toxic to aquatic life with long lasting effects.

Skin Sens. — Skin sensitization
 Acute Tox. — Acute toxicity - oral
 Skin Irrit. — Skin irritation
 Aquatic Acute — Hazardous to the aquatic environment - acute
 Aquatic Chronic — Hazardous to the aquatic environment - chronic

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to
 ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
 AOX Adsorbable organic halogen compounds
 approx. approximately
 Art., Art. no. Article number
 ASTM ASTM International (American Society for Testing and Materials)
 BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
 BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
 BSEF The International Bromine Council
 bw body weight
 CAS Chemical Abstracts Service
 CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
 CMR carcinogenic, mutagenic, reproductive toxic
 DMEL Derived Minimum Effect Level
 DNEL Derived No Effect Level
 dw dry weight
 e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
 EC European Community
 ECHA European Chemicals Agency
 EEC European Economic Community
 EINECS European Inventory of Existing Commercial Chemical Substances
 ELINCS European List of Notified Chemical Substances

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EN European Norms
 EPA United States Environmental Protection Agency (United States of America)
 etc. et cetera
 EU European Union
 EVAL Ethylene-vinyl alcohol copolymer
 Fax. Fax number
 gen. general
 GHS Globally Harmonized System of Classification and Labelling of Chemicals
 GWP Global warming potential
 IARC International Agency for Research on Cancer
 IATA International Air Transport Association
 IBC (Code) International Bulk Chemical (Code)
 IMDG-code International Maritime Code for Dangerous Goods
 incl. including, inclusive
 IUCLID International Uniform Chemical Information Database
 LQ Limited Quantities
 MARPOL International Convention for the Prevention of Marine Pollution from Ships
 n.a. not applicable
 n.av. not available
 n.c. not checked
 n.d.a. no data available
 OECD Organisation for Economic Co-operation and Development
 org. organic
 PBT persistent, bioaccumulative and toxic
 PE Polyethylene
 PNEC Predicted No Effect Concentration
 ppm parts per million
 PVC Polyvinylchloride
 REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
 REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
 RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
 SVHC Substances of Very High Concern
 Tel. Telephone
 UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
 VOC Volatile organic compounds
 vPvB very persistent and very bioaccumulative
 wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
 No responsibility.

These statements were made by:

Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

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