according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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

1.1 Product identifier

Product name : Klüberlectric KR 44-402

Article-No. : 091021

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

Use of the : Grease

Substance/Mixture

Recommended restrictions

on use

Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company : Klüber Lubrication München GmbH & Co. KG

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 Nordic A/S

Vasagatan 36 111 20 Stockholm

Sweden

Tel: +46 8 59098600 Fax: +46 8 59098601 klueber.se@klueber.com

1.4 Emergency telephone number

Emergency telephone

number

112 - ask for poison information

+49 89 7876 700 (24 hrs)

according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

## Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

#### 2.2 Label elements

# Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

#### **Additional Labelling**

EUH210 Safety data sheet available on request.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

## 3.2 Mixtures

Chemical nature : Synthetic hydrocarbon oil

lithium soap UV indicator

Components

Components				
Chemical name	CAS-No.	Classification	specific	Concentration
	EC-No.		concentration	(% w/w)
			limit	
	Index-No.		M-Factor	
	Registration number		Notes	
			Acute toxicity	
			estimate	
dilithium azelate	38900-29-7	Acute Tox.4; H302		>= 1 - < 10



according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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Version 3.5	Revision Dat 2023-10-19		last issue: 2022-08-19 first issue: 2016-06-22		Print Date: 2023- 10-19	
		254-184-4 01-2120119814-57- XXXX 01-2120119814-57- XXXX 01-2120119814-57- XXXX 01-2120119814-57- XXXX				
		olace exposure limit :		T	1	
lithium 12 hydroxys	tearate	7620-77-1 231-536-5 01-2119970893-23- XXXX 01-2119970893-23- XXXX 01-2119970893-23- XXXX 01-2119970893-23- XXXX	Not classified		>= 10 - < 20	

For explanation of abbreviations see section 16.

## **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

If inhaled : Remove person to fresh air. If signs/symptoms continue, get

medical attention.

Keep patient warm and at rest.

If breathing is irregular or stopped, administer artificial

respiration.

In case of skin contact : Remove contaminated clothing. If irritation develops, get

medical attention.

Wash off with soap and water.

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.

Do not induce vomiting without medical advice.



according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

**SECTION 5: Firefighting measures** 

5.1 Extinguishing media

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

carbon dioxide.

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion : Carbon oxides

products Nitrogen oxides (NOx)

Metal oxides

5.3 Advice for firefighters

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.

Further information : Standard procedure for chemical fires.

**SECTION 6: Accidental release measures** 

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

Do not breathe vapours, aerosols.

Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

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

courses.

Local authorities should be advised if significant spillages

cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and transfer to properly labelled containers.



according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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#### 6.4 Reference to other sections

For personal protection see section 8.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Advice on safe handling : 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.

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

handling.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

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)

Specific use(s) : Specific instructions for handling, not required.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

## **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
lithium 12- hydroxystearate	7620-77-1	NGVTime Weighted Average (Total dust)	5 mg/m3	SE AFS (2018-02-19)

## Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health	Value
			effects	
dilithium azelate	Workers	Dermal	Long-term systemic	13,5 mg/kg
			effects	bw/day
	Workers	Dermal	Long-term local	0,172 mg/cm2
			effects	_
bis(4-(1,1,3,3-	Workers	Inhalation	Long-term systemic	49,3 mg/m3



according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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tetramethylbutyl)phen yl)amine			effects	
	Workers	Dermal	Long-term systemic effects	14 mg/kg bw/day

## Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
dilithium azelate	Fresh water	0,023 mg/l
	Marine water	0.002 mg/l

#### 8.2 Exposure controls

## **Engineering measures**

none

# Personal protective equipment

Eye/face protection : Safety glasses

Hand protection

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

Remarks : 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.

The selected protective gloves have to satisfy the

specifications of Regulation (EU) 2016/425 and the standard

EN 374 derived from it.

Skin and body 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 : Filter type P

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

to the concentration and amount of the dangerous substance

at the specific workplace.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Physical state : paste



according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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Colour : beige

Odour : characteristic

Odour Threshold : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flammability (solid, gas) : Combustible Solids

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Flash point : Not applicable

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : Not applicable

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : Not applicable

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Vapour pressure : < 0,001 hPa (20 °C)

Relative density : 0,85 (20 °C)

Reference substance: Water The value is calculated

Density : 0,85 g/cm3

(20 °C)

according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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Bulk density : No data available

Relative vapour density : No data available

Particle characteristics

Particle size : Not applicable

Particle Size Distribution : Not applicable

9.2 Other information

Explosives : Not explosive

Oxidizing properties : No data available

Self-ignition : No data available

Evaporation rate : No data available

Sublimation point : No data available

# **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

No hazards to be specially mentioned.

## 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

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

#### 10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

## 10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

## 10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.



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# **SECTION 11: Toxicological information**

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

# **Acute toxicity**

**Product:** 

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

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

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

**Components:** 

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

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

Skin corrosion/irritation

**Product:** 

Remarks : This information is not available.

**Components:** 

dilithium azelate:

Assessment : No skin irritation Result : No skin irritation

lithium 12-hydroxystearate:

Assessment : No skin irritation

Method : OECD Test Guideline 439

according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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Result : No skin irritation

Serious eye damage/eye irritation

**Product:** 

Remarks : This information is not available.

**Components:** 

dilithium azelate:

Species : Rabbit

Assessment : No eye irritation Result : No eye irritation

lithium 12-hydroxystearate:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

Respiratory or skin sensitisation

**Product:** 

Remarks : This information is not available.

**Components:** 

dilithium azelate:

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

lithium 12-hydroxystearate:

Exposure routes : Dermal Species : Mouse

Method : OECD Test Guideline 429

Result : negative

Germ cell mutagenicity

**Product:** 

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

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Carcinogenicity

**Product:** 

Remarks : No data available

Reproductive toxicity

**Product:** 

Effects on fertility : Remarks: No data available

Effects on foetal development

: Remarks: No data available

STOT - single exposure

**Product:** 

Remarks : No data available

**Components:** 

dilithium azelate:

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

organ toxicant, single exposure.

STOT - repeated exposure

**Product:** 

Remarks : No data available

**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.



according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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## **Components:**

#### dilithium azelate:

No aspiration toxicity classification

#### 11.2 Information on other hazards

## **Endocrine disrupting properties**

**Product:** 

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

**Further information** 

**Product:** 

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

the toxicology of similar products.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

**Product:** 

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other :

aquatic invertebrates

Remarks: No data available

Toxicity to algae/aquatic

plants

Remarks: No data available

Toxicity to microorganisms

Remarks: No data available

**Components:** 

dilithium azelate:

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

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h

according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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lithium 12-hydroxystearate:

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

> 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/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): > 160

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 160

ma/l

Exposure time: 72 h

Method: OECD Test Guideline 201

## 12.2 Persistence and degradability

**Product:** 

Biodegradability Remarks: No data available

Physico-chemical

removability

Remarks: No data available

#### Components:

lithium 12-hydroxystearate:

Test Type: Primary biodegradation Biodegradability

Inoculum: activated sludge Result: rapidly biodegradable Biodegradation: 74,7 %

Exposure time: 28 d

Method: OECD Test Guideline 301C

### 12.3 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:**

dilithium azelate:



according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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Bioaccumulation : Bioconcentration factor (BCF): 3,0

Partition coefficient: n-

octanol/water

: log Pow: -3,56

lithium 12-hydroxystearate:

Partition coefficient: n-

octanol/water

log Pow: 2,6

12.4 Mobility in soil

**Product:** 

Mobility : Remarks: No data available

Distribution among

environmental compartments

Remarks: No data available

12.5 Results of PBT and vPvB assessment

**Product:** 

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

12.6 Endocrine disrupting properties

**Product:** 

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

12.7 Other adverse effects

**Product:** 

Additional ecological

information

: No information on ecology is available.

**SECTION 13: Disposal considerations** 

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

according to Regulation (EC) No. 1907/2006 - SE (Commission Regulation (EU) 2020/878)



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Waste codes should be assigned by the user based on the

application for which the product was used.

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.

The following Waste Codes are only suggestions:

Waste Code : used product, unused product

12 01 12\*, spent waxes and fats

uncleaned packagings

15 01 10\*, packaging containing residues of or contaminated

by hazardous substances

# **SECTION 14: Transport information**

## 14.1 UN number or ID number

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.4 Packing group

ADR : Not regulated as a dangerous good RID : Not regulated as a dangerous good



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**IMDG** Not regulated as a dangerous good IATA (Cargo) Not regulated as a dangerous good IATA (Passenger) Not regulated as a dangerous good

14.5 Environmental hazards

**ADR** Not regulated as a dangerous good RID Not regulated as a dangerous good **IMDG** Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

## **SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

mixtures and articles (Annex XVII)

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

(EU SVHC)

This product does not contain substances of very high concern

(Regulation (EC) No

1907/2006 (REACH), Article 57).

Regulation (EC) No 1005/2009 on substances that

deplete the ozone layer

(EC 1005/2009)

Not applicable

: Not applicable

Regulation (EU) 2019/1021 on persistent organic

pollutants (recast)

(EU POP)

: Not applicable

Regulation (EC) No 649/2012 of the European

Parliament and the Council concerning the export and

import of dangerous chemicals

(EU PIC)

Not applicable

Regulation (EU) 2019/1148 on the marketing and use of : Not applicable

explosives precursors



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Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial

emissions (integrated pollution prevention and control)

Not applicable

### Other regulations:

Hygiene limits (AFS 2018:1), provisions - Occupational Safety and Health Administration's provisions on hygiene limits and general advice on the application of the provisions.

Take note of the Swedish Work Environment Authority regulations on Chemical Hazards in the Working Environment (AFS 2011:19)

#### 15.2 Chemical safety assessment

This information is not available.

## **SECTION 16: Other information**

**Full text of H-Statements** 

H302 : Harmful if swallowed.

Full text of other abbreviations

SE AFS : Sweden. Occupational Exposure Limit Values

SE AFS / NGV : Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; 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



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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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory: TRGS - Technical Rule for Hazardous Substances: TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

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