



Trade name: Modralit 3K Hardener

Substance number: 1618M

Version: 2 / GB

Date revised: 12.09.2024

Replaces Version: 1 / GB

Print date: 12.09.2024

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

1.1. Product identifier

Modralit 3K Hardener

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

Use of the substance/preparation

Hardener

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Dreve Dentamid GmbH

Max-Planck-Straße 31

DE-59423 Unna

Telephone no. +49 2303 8807-0

Fax no. +49 2303 8807-29

Information provided by / telephone Department Research & Development: Fax: +49 2303 8807-562

E-mail address of person responsible sicherheitsdatenblatt@dreve.com

for this SDS

1.4. Emergency telephone number

Henkel Fire Department / 24h-Emergency-Contact-No.: +49 211 797-3350

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4 H332

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Resp. Sens. 1 H334

Skin Sens. 1 H317

Carc. 2 H351

STOT SE 3 H335

STOT RE 2 H373

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms

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**Signal word**

Danger

Hazard statements

H332	Harmful if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/ attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains	Methylendiisocyanat; 4,4'-Methylenediphenyl diisocyanate; 2,2'-Methylene diphenyldiisocyanate; o-(p-Isocyanatobenzyl)phenylisocyanate
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Supplemental information

EUH204	Contains isocyanates. May produce an allergic reaction.
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2.3. Other hazards

No special hazards have to be mentioned.

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients

3.2. Mixtures**Hazardous ingredients****Methylendiisocyanat**

CAS No.	9016-87-9	
Concentration	>= 54	%
Classification (Regulation (EC) No. 1272/2008)		
	Acute Tox. 4	H332
	Skin Irrit. 2	H315
	Eye Irrit. 2	H319
	Resp. Sens. 1	H334



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Skin Sens. 1	H317
Carc. 2	H351
STOT SE 3	H335
STOT RE 2	H373

Concentration limits (Regulation (EC) No. 1272/2008)

Eye Irrit. 2	H319	>= 5 %
Resp. Sens. 1	H334	>= 0,1 %
Skin Irrit. 2	H315	>= 5 %
STOT SE 3	H335	>= 5 %

cATpE	inhalative, Dust/Mist	1,5	mg/l
cATpE	inhalative, Vapors	11	mg/l

4,4'-Methylenediphenyl diisocyanate

CAS No.	101-68-8
EINECS no.	202-966-0
Registration no.	01-2119457014-47
Concentration	>= 20 < 25 %

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Resp. Sens. 1	H334
Skin Sens. 1	H317
Carc. 2	H351
STOT SE 3	H335
STOT RE 2	H373

Concentration limits (Regulation (EC) No. 1272/2008)

Eye Irrit. 2	H319	>= 5 %
Resp. Sens. 1	H334	>= 0,1 %
Skin Irrit. 2	H315	>= 5 %
STOT SE 3	H335	>= 5 %

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note 2, C

o-(p-Isocyanatobenzyl)phenylisocyanate

CAS No.	5873-54-1
EINECS no.	227-534-9
Registration no.	01-2119480143-45
Concentration	>= 5 < 10 %

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Resp. Sens. 1	H334
Skin Sens. 1	H317
Carc. 2	H351
STOT SE 3	H335
STOT RE 2	H373

Concentration limits (Regulation (EC) No. 1272/2008)

Eye Irrit. 2	H319	>= 5 %
Resp. Sens. 1	H334	>= 0,1 %
Skin Irrit. 2	H315	>= 5 %
STOT SE 3	H335	>= 5 %

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note 2, C



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2,2'-Methylene diphenyldiisocyanate

CAS No.	2536-05-2
EINECS no.	219-799-4
Registration no.	01-2119927323-43
Concentration	>= 1 < 5 %
Classification (Regulation (EC) No. 1272/2008)	
Acute Tox. 4	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Resp. Sens. 1	H334
Skin Sens. 1	H317
Carc. 2	H351
STOT SE 3	H335
STOT RE 2	H373

Concentration limits (Regulation (EC) No. 1272/2008)

Eye Irrit. 2	H319	>= 5 %
Resp. Sens. 1	H334	>= 0,1 %
Skin Irrit. 2	H315	>= 5 %
STOT SE 3	H335	>= 5 %

Additional remarks:

CLP

Regulation (EC) No 1272/2008, Annex VI, Note 2, C

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Remove contaminated clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid

After inhalation

Remove the casualty into fresh air and keep him calm. In the event of symptoms take medical treatment.

After skin contact

After contact with skin, wash immediately with plenty of water and soap. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Take medical treatment.

After ingestion

Call in a physician immediately and show him the Safety Data Sheet. Rinse mouth thoroughly with water. Let plenty of water be drunk in small gulps. Do not induce vomiting.

Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

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

Until now no symptoms known so far.

4.3. Indication of any immediate medical attention and special treatment needed**Hints for the physician / hazards**

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Recommended: alcohol resistant foam, CO₂, powders, water spray/mist, Extinguishing measures to suit surroundings

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible.

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Do not inhale explosion and/or combustion gases. In case of combustion use a suitable breathing apparatus. Wear full protective suit.

Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations. Observe manufacturer's / distributor's instructions.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away sources of ignition. Ensure adequate ventilation. Use breathing apparatus if exposed to vapours/dust/aerosol. Avoid contact with skin, eyes and clothing. Use personal protective clothing. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Retain and dispose of contaminated wash water. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Pick up rest with suitable absorbent materials. Do not pick up with the help of saw-dust or other combustible substances. Clean contaminated floors and objects thoroughly, observing environmental regulations. Containers in which spilt substance has been collected must be adequately labelled. Dispose of as prescribed.

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid formation of



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aerosols. Avoid impact, friction and electro-static loading; risk of ignition! Keep container tightly closed.

Advice on protection against fire and explosion

Keep away from sources of heat and ignition. No smoking. Take action to prevent static discharges. Avoid impact and friction. Use only explosion-proof equipment. Keep away from combustible material. Wear shoes with conductive soles.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in original packaging, tightly closed. Storage rooms must be properly ventilated. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Hints on storage assembly

Do not store together with foodstuffs. Do not store with strong oxidizing agents.

Further information on storage conditions

Keep under lock and key or accessible only to specialists or people who are authorized. Keep container tightly closed and in a well-ventilated place. Keep in a cool place

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

Methylendiisocyanat

Type AGW

E

Value 0,05 mg/m³

Maximum limit value: (I); Skin resorption / sensibilisation: H; Pregnancy group: Y; Status: 5/2010

Biological limit values

4,4'-Methylenediphenyl diisocyanate

List BGW (TRGS 903)

Value 0,01 mg/g creatinine

Parameter 4,4'-diaminodiphenylmethane

Testing material Urine (U)

Test date End of exposure or end of shift (b)

Other information

Contains no substances with occupational exposure limit values.

8.2. Exposure controls

General protective and hygiene measures

Do not smoke during work time. Hold emergency shower available. Hold eye wash fountain available. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Take off immediately all contaminated clothing. Do not eat or drink during work time. Storage of foodstuffs in work rooms is forbidden. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

Respiratory protection

Do not inhale vapours; Use suitable respiratory protective device in case of insufficient ventilation

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.



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Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Hand protection must comply with EN 374.
Appropriate Material nitrile

Eye protection

Safety glasses

Body protection

Clothing as usual in the chemical industry.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	liquid	
Colour	dark brown	
Odour	putrid	
Melting point		
Value	41	°C
Freezing point		
Remarks	not determined	
Boiling point or initial boiling point and boiling range		
Value	> 350	°C
Flammability		
evaluation	not determined	
Upper and lower explosive limits		
Lower explosion limit	0,4	%(V)
Remarks	not determined	
Flash point		
Value	229	°C
Method	DIN 51758	
Auto-ignition temperature		
Value	400	°C
Decomposition temperature		
Remarks	not determined	
pH value		
Remarks	not determined	
Viscosity		
Remarks	not determined	
Solubility(ies)		
Remarks	not determined	
Partition coefficient n-octanol/water (log value)		
Remarks	not determined	
Vapour pressure		
Remarks	not determined	
Density and/or relative density		
Value	1,22	g/cm ³
Temperature	20	°C
Method	DIN 53217	



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Relative vapour density

Remarks not determined

9.2. Other information**Odour threshold**

Remarks not determined

Evaporation rate (ether = 1) :

Remarks not determined

Solubility in water

Remarks virtually insoluble

Explosive properties

evaluation no

Oxidising properties

Remarks not determined

Solvent content

Value 0,0 %

Other information

None known

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability

No hazardous reactions known.

10.3. Possibility of hazardous reactions

Keep away from oxidising agents, strongly alkaline and strongly acid materials, amines, alcohols and water. Protect from heat and direct sunlight

10.4. Conditions to avoid

Protect from heat and direct sunlight

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

Carbon monoxide, nitrous oxides (NOx), Possible in traces, Hydrocyanic acid

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity**

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

Acute oral toxicity (Components)**Methylendiisocyanat**

Species rat



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LD50 49000 mg/kg

4,4'-Methylenediphenyl diisocyanate

LD50 > 2000 mg/kg

Remarks Test conducted with a similar formulation.

o-(p-Isocyanatobenzyl)phenylisocyanate

LD50 > 2000 mg/kg

Remarks Test conducted with a similar formulation.

2,2'-Methylene diphenyldiisocyanate

LD50 > 2000 mg/kg

Remarks Test conducted with a similar formulation.

Acute dermal toxicity

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

Acute dermal toxicity (Components)**Methylenediisocyanat**

Species rabbit

LD50 > 9400 mg/kg

o-(p-Isocyanatobenzyl)phenylisocyanate

> 9400 mg/kg

Remarks Test conducted with a similar formulation.

2,2'-Methylene diphenyldiisocyanate

LD50 > 9400 mg/kg

Remarks Test conducted with a similar formulation.

Acute inhalational toxicity

Remarks The classification criteria are met.

Acute inhalative toxicity (Components)**4,4'-Methylenediphenyl diisocyanate**

Species rat

LC50 368 mg/m³

Duration of exposure 4 h

Administration/Form Dust/Mist

Method OECD 403

2,2'-Methylene diphenyldiisocyanate

Species rat (female)

LC50 685,75 mg/m³

Duration of exposure 4 h

Administration/Form Dust/Mist

Method OECD 403

2,2'-Methylene diphenyldiisocyanate

Species rat (male)

LC50 527,2 mg/m³

Duration of exposure 4 h

Administration/Form Dust/Mist

Method OECD 403

o-(p-Isocyanatobenzyl)phenylisocyanate

Species rat (male)

LC50 387 mg/m³

Duration of exposure 4 h

Administration/Form Dust/Mist

Method OECD 403

o-(p-Isocyanatobenzyl)phenylisocyanate

Species rat (female)

LC50 645 mg/m³



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Duration of exposure 4 h
Administration/Form Dust/Mist

Methylendiisocyanat

Species rat
LC50 0,48 mg/l
Duration of exposure 4 h

Skin corrosion/irritation

evaluation irritant
Remarks The classification criteria are met.

Skin corrosion/irritation (Components)**4,4'-Methylenediphenyl diisocyanate**

Species rabbit
evaluation irritant
Method OECD 404

o-(p-Isocyanatobenzyl)phenylisocyanate

evaluation irritant
Remarks Test conducted with a similar formulation.

Methylendiisocyanat

evaluation irritant

Serious eye damage/irritation

evaluation irritant
Remarks The classification criteria are met.

Serious eye damage/irritation (Components)**4,4'-Methylenediphenyl diisocyanate**

Species rabbit
evaluation irritant
Method OECD 405

o-(p-Isocyanatobenzyl)phenylisocyanate

evaluation slightly irritant
Remarks Test conducted with a similar formulation.

Methylendiisocyanat

evaluation irritant

Sensitization

evaluation May cause sensitization by inhalation.
Remarks The classification criteria are met.

Sensitization (Components)**4,4'-Methylenediphenyl diisocyanate**

Route of exposure dermal
Species guinea pig
evaluation sensitizing
Method OECD 406

4,4'-Methylenediphenyl diisocyanate

Route of exposure inhalative
Species guinea pig
evaluation sensitizing

2,2'-Methylene diphenyldiisocyanate

Route of exposure dermal
Species mouse
evaluation sensitizing
Method OECD 429

2,2'-Methylene diphenyldiisocyanate



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Route of exposure evaluation inhalative sensitizing
Remarks Test conducted with a similar formulation.

o-(p-Isocyanatobenzyl)phenylisocyanate

Route of exposure evaluation dermal sensitizing
Remarks Test conducted with a similar formulation.

o-(p-Isocyanatobenzyl)phenylisocyanate

Route of exposure evaluation inhalative sensitizing
Remarks Test conducted with a similar formulation.

Methylendiisocyanat

Route of exposure evaluation dermal sensitizing

Methylendiisocyanat

Route of exposure evaluation inhalative sensitizing

Subacute, subchronic, chronic toxicity

Remarks not determined

Mutagenicity

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

Reproductive toxicity

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

Carcinogenicity

evaluation Suspected of causing cancer.
Remarks The classification criteria are met.

Carcinogenicity (Components)**4,4'-Methylenediphenyl diisocyanate**

Route of exposure inhalative
Species rat
Dose 1 mg/m³
evaluation Suspected of causing cancer.

2,2'-Methylene diphenyldiisocyanate

Route of exposure inhalative
Dose 1 mg/m³
evaluation Suspected of causing cancer.

o-(p-Isocyanatobenzyl)phenylisocyanate

Route of exposure inhalative
Dose 1 mg/m³
evaluation Suspected of causing cancer.

Methylendiisocyanat

evaluation Suspected of causing cancer.

Specific Target Organ Toxicity (STOT)**Single exposure**

Remarks The classification criteria are met.
evaluation May cause respiratory irritation.

Repeated exposure

Remarks The classification criteria are met.
evaluation May cause damage to organs through prolonged or repeated exposure

Specific Target Organ Toxicity (STOT) (Components)



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4,4'-Methylenediphenyl diisocyanate**Repeated exposure**

evaluation May cause damage to organs through prolonged or repeated exposure

Route of exposure inhalative

Species rat

LOAEL 0,23 mg/m³**4,4'-Methylenediphenyl diisocyanate****Single exposure**

evaluation May cause respiratory irritation.

Species rat

2,2'-Methylene diphenyldiisocyanate**Single exposure**

evaluation May cause respiratory irritation.

Organs: Lungs

NOAEC 1 mg/m³**2,2'-Methylene diphenyldiisocyanate****Repeated exposure**

evaluation May cause damage to organs through prolonged or repeated exposure

Route of exposure inhalative

Organs: Respiratory tract

NOAEC 0,2 mg/m³**o-(p-Isocyanatobenzyl)phenylisocyanate****Single exposure**

evaluation May cause respiratory irritation.

Route of exposure inhalative

Organs: Respiratory tract

NOAEC 1 mg/m³**o-(p-Isocyanatobenzyl)phenylisocyanate****Repeated exposure**

evaluation May cause damage to organs through prolonged or repeated exposure

Route of exposure inhalative

Organs: Lungs

NOAEC 0,2 mg/m³

Remarks Test conducted with a similar formulation.

Methylenediisocyanat**Single exposure**

evaluation May cause respiratory irritation.

Methylenediisocyanat**Repeated exposure**

evaluation May cause damage to organs through prolonged or repeated exposure

Aspiration hazard

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

11.2. Information on other hazards**Endocrine disrupting properties with respect to humans**

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

Experience in practice

Inhalation may lead to irritation of the respiratory tract.

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Other information

No toxicological data are available.

SECTION 12: Ecological information

12.1. Toxicity**General information**

not determined

Fish toxicity (Components)**4,4'-Methylenediphenyl diisocyanate**

Species	zebra fish (Brachydanio rerio)			
LL50	>	100		mg/l
Duration of exposure		96	h	
Method	OECD 203			

Daphnia toxicity (Components)**4,4'-Methylenediphenyl diisocyanate**

Species	Daphnia magna			
EL0		4,3		mg/l
Duration of exposure		48	h	
Method	OECD 202			

4,4'-Methylenediphenyl diisocyanate

Species	Daphnia magna			
NOEC	>=	10		mg/l
Duration of exposure		21	d	

o-(p-Isocyanatobenzyl)phenylisocyanate

Species	Daphnia magna			
EL0		1,9		mg/l
Duration of exposure		48	h	
Method	OECD 202			

o-(p-Isocyanatobenzyl)phenylisocyanate

NOEC	>=	10		mg/l
Duration of exposure		21	d	

Algae toxicity (Components)**4,4'-Methylenediphenyl diisocyanate**

Species	Desmodesmus subspicatus			
EL50	>	100		mg/l
Duration of exposure		72	h	
Method	OECD 201			

Bacteria toxicity (Components)**4,4'-Methylenediphenyl diisocyanate**

Species	activated sludge			
EC50	>	50		mg/l
Duration of exposure		3	h	
Method	OECD 209			

12.2. Persistence and degradability**General information**

not determined

Ready degradability (Components)



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4,4'-Methylenediphenyl diisocyanate

Value 20 %

Duration of test 28 d

o-(p-Isocyanatobenzyl)phenylisocyanate

Remarks Test conducted with a similar formulation.

2,2'-Methylene diphenyldiisocyanate**12.3. Bioaccumulative potential****General information**

not determined

Partition coefficient n-octanol/water (log value)

Remarks not determined

Octanol/water partition coefficient (log Pow) (Components)**4,4'-Methylenediphenyl diisocyanate**

log Pow 4,51

Temperature 22 °C

o-(p-Isocyanatobenzyl)phenylisocyanate

log Pow 4,52

Temperature 22 °C

2,2'-Methylene diphenyldiisocyanate

log Pow 4,52

Temperature 22 °C

12.4. Mobility in soil**General information**

not determined

12.5. Results of PBT and vPvB assessment**General information**

not determined

Results of PBT and vPvB assessment

The product contains no PBT substances

The product contains no vPvB substances.

12.6 Endocrine disrupting properties**Endocrine disrupting properties with respect to the environment**

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects**General information**

not determined

General information / ecology

Do not allow to enter soil, waterways or waste water canal. Avoid release into the atmosphere.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations for the product**



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Must not be disposed together with household garbage.
Dispose of waste according to applicable legislation.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off as product waste.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number or ID number	The product does not constitute a hazardous substance in land transport.	The product does not constitute a hazardous substance in sea transport.	The product does not constitute a hazardous substance in air transport.
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)		-	-
Label			
14.4. Packing group		-	-

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Other regulations, restrictions and prohibition regulations**

From 24. August 2023, an appropriate training must be provided for industrial or commercial use.

Other information

All components are contained in the TSCA inventory or exempted.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4	H332	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Resp. Sens. 1	H334	Calculation method
Skin Sens. 1	H317	Calculation method
Carc. 2	H351	Calculation method
STOT SE 3	H335	Calculation method



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STOT RE 2

H373

Calculation method

Hazard statements listed in Chapter 2/3

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

CLP categories listed in Chapter 2/3

Acute Tox. 4	Acute toxicity, Category 4
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Eye irritation, Category 2
Resp. Sens. 1	Respiratory sensitization, Category 1
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.