

ROXIDAN

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 29-10-2025

Version : 7

Print date: 29-10-2025

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

1.1 Product identifier

Product identifier : 391

Name: ROXIDAN

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

Relevant identified uses: Coating material

1.3 Details of the supplier of the safety data sheet

Supplier: San Marco Group Spa

Address: Via Alta, 10

Postal code/City: 30020 - Marcon (VE)

Country: Italy

Telephone: +39 041 4569322

E-mail (competent person): sicurezza.prodotti@sanmarcogroup.it

1.4 Emergency telephone number

Emergency phone number

Malta: Emergency number: 112 (24/7)

Luxembourg: (+352) 8002 5500

Free telephone number with a 24/7 access

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

Additional information

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

Precautionary statements

This information is not available.

Supplemental hazard information

EUH208 - Contains 1,2-benzisothiazol-3(2H)-one; reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

EUH210 - Safety data sheet available on request.

2.3 Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

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English

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Hazardous ingredients

Name	Product identifier	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL, M-factor, ATE
aluminium powder (stabilised)	CAS No. : 7429-90-5 EC No.: 231-072-3 Index No.: 013-002-00-1 EU REACH No.: 01-2119529243-45-XXXX	3.0% <= C < 5.0%	Flam. Sol. 1, H228 / Water-react. 2, H261	Note: T
2-butoxyethanol	CAS No. : 111-76-2 EC No.: 203-905-0 Index No.: 603-014-00-0 EU REACH No. : 01-2119475108-36-XXXX	3.0% <= C < 5.0%	oral Acute Tox. 4, H302 / inhalation Acute Tox. 3, H331 / Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / Substance with a community workplace exposure limit	ATE (oral):1200.0 mg/kg bw / ATE (inhalation, vapour):3.0 mg/L
1,2-benzisothiazol-3(2H)-one	CAS No. : 2634-33-5 EC No.: 220-120-9 Index No.: 613-088-00-6	0.01% <= C < 0.036%	oral Acute Tox. 4, H302 / inhalation Acute Tox. 2, H330 / Skin Irrit. 2, H315 / Eye Dam. 1, H318 / Skin Sens. 1A, H317 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410	Skin Sens. 1A ; H317: C >= 0.036% / ATE (oral):450.0 mg/kg bw / ATE (inhalation, dust/mist):0.21 mg/L / M (acute) =1 / M (chronic) =1
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS No. : 55965-84-9 Index No.: 613-167-00-5	0.00015% <= C < 0.0015%	oral Acute Tox. 3, H301 / dermal Acute Tox. 2, H310 / inhalation Acute Tox. 2, H330 / Skin Corr. 1C, H314 / Eye Dam. 1, H318 / Skin Sens. 1, H317 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410 / EUH071,	Skin Corr. 1C ; H314: C >= 0.6% / Skin Irrit. 2 ; H315: 0.06% <= C < 0.6% / Eye Dam. 1 ; H318: C >= 0.6% / Eye Irrit. 2 ; H319: 0.06% <= C < 0.6% / Skin Sens. 1A ; H317: C >= 0.0015% / ATE (oral):66.0 mg/kg bw / ATE (dermal):141.0 mg/kg bw / ATE (inhalation, dust/mist):0.17 mg/L / M (acute) =100 / M (chronic) =100

Additional information

T: This substance may be marketed in a form which does not have the physical hazards as indicated by the classification in the entry in Part 3. If the results of the relevant method or methods in accordance with Part 2 of Annex I of this Regulation show that the specific form of substance marketed does not exhibit this physical property or these physical hazards, the substance shall be classified in accordance with the result or results of this test or these tests. Relevant information, including reference to the relevant test method(s) shall be included in the safety data sheet.

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Following inhalation:

Remove casualty to fresh air and keep warm and at rest.

Following skin contact:

Wash immediately with:
Water and soap

After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Following ingestion:

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

There are no specific information on symptoms and effects caused by the product. Delayed effects: based on the information currently available, there are no known cases of delayed effects following exposure to this product.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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Suitable extinguishing media

Water
Carbon dioxide (CO₂)

Unsuitable extinguishing media

No special measures are necessary.

5.2 Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3 Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.
Move undamaged containers from immediate hazard area if it can be done safely.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Use personal protection equipment.
Remove persons to safety.

6.1.2 For emergency responders

Use personal protection equipment.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil.
Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
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

6.3.1 For containment

Suitable material for taking up:
Absorbing material, organic
Sand

6.3.2 For cleaning up

Wash with plenty of water.

6.3.3 Other information

No data available

6.4 Reference to other sections

Personal protection equipment: see section 8
Disposal: see section 13
Safe handling: see section 7

SECTION 7: Handling and storage

7.1 Precautions for safe handling

7.1.1 Protective measures

No special measures are necessary.

7.1.2 Advices on general occupational hygiene

Avoid contact with skin, eyes and clothes.
Remove contaminated, saturated clothing.
Wash hands and face before breaks and after work and take a shower if necessary.
When using do not eat, drink, smoke, sniff.

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7.1.3 Measures to prevent aerosol and dust generation

Fresh air (open windows and doors) is necessary.

7.1.4 Environmental precautions

No special measures are necessary.

7.1.5 Measures to prevent fire

No special fire protection measures are necessary.

7.2 Conditions for safe storage, including any incompatibilities

7.2.1 Technical measures and storage conditions

Keep in a cool, well-ventilated place.

7.2.2 Requirements for storage rooms and vessels

This information is not available.

7.2.3 Packaging materials:

This information is not available.

7.2.4 Storage class

This information is not available.

7.3 Specific end use(s)

7.3.1 Recommendation

Observe instructions for use.

7.3.2 Industrial sector specific solutions

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

aluminium powder (stabilised) - CAS: 7429-90-5

Type	Country	mg/m ³	ppm	Test duration	mg/m ³	ppm	Test duration	Remark	Source
ACGIH		1.0		8h				(R), A4 - Pneumoconiosis, LRT irr, neurotoxicity	
WEL		4.0		8h			15min	respirable dust	EH40/2005 Workplace exposure limits

2-butoxyethanol - CAS: 111-76-2

Type	Country	mg/m ³	ppm	Test duration	mg/m ³	ppm	Test duration	Remark	Source
UE		98.0	20.0	8h	246.0	50.0		Skin	
ACGIH			20.0	8h				A3, BEI - Eye and URT irr	
WEL		123.0	25.0	8h	246.0	50.0	15min	Sk, BMGV	EH40/2005 Workplace exposure limits

Monitoring and observation processes

This information is not available.

DNEL values

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5

DNEL worker	Exposure route	Exposure time	Type	Value	Remark
Workers	Inhalation	long-term	systemic	6.81 mg/m ³	
Consumers	Inhalation	long-term	systemic	1.2 mg/m ³	
Workers	dermal	long-term	systemic	0.966 mg/kg bw/day	
Consumers	dermal	long-term	systemic	0.345 mg/kg bw/day	

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) - CAS: 55965-84-9

DNEL worker	Exposure route	Exposure time	Type	Value	Remark
Workers	Inhalation	long-term	local	0.02 mg/m ³	

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Consumers	Inhalation	long-term	local	0.02 mg/m ³	
Workers	Inhalation	short-term	acute	0.04 mg/m ³	
Consumers	Inhalation	short-term	acute	0.04 mg/m ³	
Consumers	oral	long-term	systemic	0.09 mg/kg bw/day	
Consumers	oral	short-term	acute	0.11 mg/kg bw/day	

aluminium powder (stabilised) - CAS: 7429-90-5

DNEL worker	Exposure route	Exposure time	Type	Value	Remark
Workers	Inhalation	long-term	systemic	3.72 mg/m ³	
Workers	Inhalation	long-term	local	3.72 mg/m ³	
Consumers	oral	long-term	systemic	3.95 mg/kg	

2-butoxyethanol - CAS: 111-76-2

DNEL worker	Exposure route	Exposure time	Type	Value	Remark
Workers	dermal	short-term	long-term	89.0 mg/kg	
Consumers	dermal	short-term	long-term	89.0 mg/kg	
Workers	Inhalation	short-term	long-term	1091.0 mg/m ³	
Consumers	Inhalation	short-term	long-term	426.0 mg/m ³	
Workers	dermal	long-term	long-term	125.0 mg/kg	
Consumers	dermal	long-term	long-term	75.0 mg/kg	
Workers	Inhalation	long-term	long-term	98.0 mg/m ³	
Consumers	Inhalation	long-term	long-term	59.0 mg/m ³	
Consumers	oral	short-term	long-term	26.7 mg/kg	
Workers	Inhalation	short-term	long-term	246.0 mg/m ³	
Consumers	Inhalation	short-term	long-term	147.0 mg/m ³	
Consumers	oral	long-term	long-term	6.3 mg/kg	

PNEC

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5

Type	Value	Remark
aquatic, freshwater	4.03 µg/L	
aquatic, marine water	0.403 µg/L	
sewage treatment plant	1.03 mg/L	
sediment, freshwater	0.499 mg/kg	
sediment, marine water	0.499 mg/kg	
soil	3.0 mg/kg	

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) - CAS: 55965-84-9

Type	Value	Remark
aquatic, freshwater	3.39 µg/L	
aquatic, marine water	3.39 µg/L	
sewage treatment plant	0.23 mg/L	
sediment, freshwater	0.027 mg/kg	
sediment, marine water	0.027 mg/kg	
soil	0.01 mg/kg	

aluminium powder (stabilised) - CAS: 7429-90-5

Type	Value	Remark
aquatic, freshwater	0.0749 mg/L	
sewage treatment plant	20.0 mg/L	

2-butoxyethanol - CAS: 111-76-2

Type	Value	Remark
aquatic, freshwater	8.8 mg/L	
aquatic, marine water	0.88 mg/L	
sediment, freshwater	34.6 mg/kg	
sediment, marine water	3.46 mg/kg	
sewage treatment plant	463.0 mg/L	
secondary poisoning	20.0 mg/kg	
soil	2.33 mg/kg	

Biological limit values

This information is not available.

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8.2 Exposure controls

Appropriate engineering controls

See section 7. No additional measures necessary.

Personal protection equipment

Skin protection

Body protection:

Body protection: not required.

Hand protection

Hand protection is not required.

Eye/face protection

Eye protection: not required.

Respiratory protection

Usually no personal respirative protection necessary.

Thermal hazards

This information is not available.

Environmental exposure controls

This information is not available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	various
Odour	characteristic
Melting point	Not applicable
Freezing point	<0 °C Remark: waterfall
Softening point	Not applicable
Boiling point or initial boiling point and boiling range	>100 °C Remark: waterfall
flammability	Non-flammable.
Lower and upper explosion limit	Not applicable
Flash point	Not applicable
pH	7.5 < pH < 8.5
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable

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Viscosity	This information is not available. Remark: Tixotropic
Water solubility	emulsifiable
Fat solubility (Oil)	This information is not available.
Solubility (Ethanol)	This information is not available.
Partition coefficient n-octanol/water (log value)	Not applicable
Vapour pressure	This information is not available.
Density	1,13 kg/L
Relative vapour density	This information is not available.
refraction index	This information is not available.
Particle size	Not applicable
Particle size distribution range	Not applicable
Shape and aspect ratio	Not applicable
Aggregation and agglomeration state	Not applicable
Specific surface area	Not applicable

9.2 Other information

9.2.1 Information with regard to physical hazard classes

This information is not available.

9.2.2 Other safety characteristics

This information is not available.

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is considered to be non-reactive under normal use conditions.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No known hazardous reactions.
Further risks: see subsection 2.3.

10.4 Conditions to avoid

Stable under recommended storage and handling conditions.
Further information on storage conditions: see subsection 7.2.

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10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

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

Mixtures

Acute toxicity

ate (oral):	37500.0 mg/kg bw
ate (inhalation, vapour):	93.75 mg/L

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

Skin corrosion/irritation

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

Serious eye damage/irritation

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

Respiratory or skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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.

Aspiration hazard

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

Substances

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5

Acute toxicity

Method	Species:	Exposure route	Exposure time	Value	Source	Notes	Considerations
LD50	Rat	oral		> 15000.0 mg/kg			
LD50	Rat	dermal		> 2000.0 mg/kg			

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) - CAS: 55965-84-9

Respiratory or skin sensitisation

Method	Species:	Exposure route	Exposure time	Value	Source	Notes	Considerations
	Guinea pig	dermal				OECD 406, sensitising - S 171 (b)	

aluminium powder (stabilised) - CAS: 7429-90-5

Acute toxicity

Method	Species:	Exposure route	Exposure time	Value	Source	Notes	Considerations
LC50	Rat	Inhalation (dust/mist)		> 5.0 mg/L			

2-butoxyethanol - CAS: 111-76-2

Acute toxicity

Method	Species:	Exposure route	Exposure time	Value	Source	Notes	Considerations
LD50	Rat	oral		615.0 mg/kg			
LD50	Rabbit	dermal		405.0 mg/kg			
LC50	Rat	Inhalation	4h	2.2 mg/L			

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11.2 Information on other hazards

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

This information is not available.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow uncontrolled discharge of product into the environment.

There are no data available on the mixture itself.

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

Mixtures

There are no data available on the mixture itself.

Substances

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5

Acute (short-term) toxicity to algae and cyanobacteria

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
EC50	Selenastrum capricornutum	72h	0.11 mg/L	OECD 201			
EC50	Selenastrum capricornutum	72h	0.11 mg/L	OECD 201			

Aquatic acute toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
EC50	Daphnia magna (Big water flea)	48h	3.27 mg/L	OECD 202			

Acute (short-term) fish toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
LC50	Oncorhynchus mykiss (Rainbow trout)	96h	2.2 mg/L	Oecd 203			

Aquatic chronic toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
NOEC	Daphnia magna (Big water flea)	21d	1.2 mg/L	Oecd 211			

Chronic (long-term) fish toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
NOEC	Oncorhynchus mykiss (Rainbow trout)	28d	0.21 mg/L	Oecd 215			

Chronic (long-term) toxicity to algae and cyanobacteria

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
NOEC	Selenastrum capricornutum	72h	0.04 mg/L	OECD 201			

Impact on sewage treatment plants

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
EC50		3h	13.0 mg/L	OECD 209			
EC20		3h	3.3 mg/L	OECD 209			

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) - CAS: 55965-84-9

Aquatic acute toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
EC50	Daphnia magna (Big water flea)	48h	0.1 mg/L	OECD 202			
EC50	Skeletonema costatum	48h	0.0052 mg/L	OECD 201			Rac Opinion

Acute (short-term) toxicity to algae and cyanobacteria

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
EC50	Pseudokirchneriella subcapitata	72h	0.048 mg/L	OECD 201			

Acute (short-term) fish toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
LC50	Oncorhynchus mykiss	96h	0.22 mg/L	Oecd 203			

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Aquatic chronic toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
NOEC	Daphnia magna (Big water flea)	21d	0.004 mg/L	Oecd 211			

Chronic (long-term) fish toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
NOEC	Oncorhynchus mykiss (Rainbow trout)	28d	0.098 mg/L	Oecd 215			

Chronic (long-term) toxicity to algae and cyanobacteria

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
NOEC	Pseudokirchneriella subcapitata	72h	0.0012 mg/L	OECD 201			

Impact on sewage treatment plants

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
EC50		3h	7.92 mg/L	OECD 209			
EC20		3h	0.97 mg/L	OECD 209			

2-butoxyethanol - CAS: 111-76-2

Aquatic acute toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
LC50	Danio rerio (zebrafish)	96h	1474.0 mg/L				
EC50	Pseudokirchneriella subcapitata	48h	1550.0 mg/L				
EC50	Daphnia magna (Big water flea)	72h	1840.0 mg/L				

12.2 Persistence and degradability

Mixtures

This information is not available.

Substances

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5

Inoculum:	Assessment/classification	Test duration	parameter	Value	Method	Remark
Poorly biodegradable.						RAC opinion

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) - CAS: 55965-84-9

Inoculum:	Assessment/classification	Test duration	parameter	Value	Method	Remark
Poorly biodegradable.						RAC opinion

12.3 Bioaccumulative potential

Mixtures

This information is not available.

Substances

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5

Assessment/classification	Test type	Test duration	Species:	Value	Method	Remark
Does not accumulate in organisms.	Bioconcentration factor (BCF)		Fish	6.95		Oecd 305
Does not accumulate in organisms.	Partition coefficient n-octanol/water (log value)			0.7	HPLC	Oecd 117

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) - CAS: 55965-84-9

Assessment/classification	Test type	Test duration	Species:	Value	Method	Remark
Does not accumulate in organisms.	Bioconcentration factor (BCF)			3.16		calculated
Does not accumulate in organisms.	Log KOW			<0.71 (n-octanol/water)	HPLC	

12.4 Mobility in soil

Mixtures

This information is not available.

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Substances

This information is not available.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7 Other adverse effects

This information is not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste codes/waste designations according to EWC/AVV

NO English translation

13.1.1 Disposal operations

Dispose of waste according to applicable legislation.

Non-contaminated packages must be recycled or disposed of.

13.1.2 Other disposal recommendations

Recycle according to official regulations.

SECTION 14: Transport information

14.1 UN number

All transport carriers

No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name

All transport carriers

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

All transport carriers

No dangerous good in sense of these transport regulations.

14.4 Packing group

All transport carriers

No dangerous good in sense of these transport regulations.

14.5 Environmental hazards

All transport carriers

No dangerous good in sense of these transport regulations.

14.6 Special precautions for user

All transport carriers

No dangerous good in sense of these transport regulations.

14.7 Maritime transport in bulk according to IMO instruments

No transport as bulk according to IBC Code.

SECTION 15: Regulatory information

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

EU legislation

Regulation (EC) No 1907/2006 and subsequent amendments

Regulation (EC) No 1272/2008 (CLP) and subsequent amendments

Latest amendment

Commission delegated Regulation (EU) 2024/2865

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Regulation (EU) No. 2020/878
Directive 2004/42/EC on the limitation of emissions of volatile organic compounds
Not relevant

Other regulations (EU)

This information is not available.

Regulation (EC) No. 1907/2006 (REACH), Annex XVII (restrictions)

Mixtures

Use restriction according to REACH annex XVII, no.: none

Other relevant ingredients

Use restriction according to REACH annex XVII, no.: 75

- aluminium powder (stabilised) (CAS: 7429-90-5; EINECS: 231-072-3; INDEX: 013-002-00-1)
- 2-butoxyethanol (CAS: 111-76-2; EINECS: 203-905-0; INDEX: 603-014-00-0)
- 1,2-benzisothiazol-3(2H)-one (CAS: 2634-33-5; EINECS: 220-120-9; INDEX: 613-088-00-6)
- reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (CAS: 55965-84-9; INDEX: 613-167-00-5)

Use restriction according to REACH annex XVII, no.: 3

- aluminium powder (stabilised) (CAS: 7429-90-5; EINECS: 231-072-3; INDEX: 013-002-00-1)
- 1,2-benzisothiazol-3(2H)-one (CAS: 2634-33-5; EINECS: 220-120-9; INDEX: 613-088-00-6)

Use restriction according to REACH annex XVII, no.: 40

- aluminium powder (stabilised) (CAS: 7429-90-5; EINECS: 231-072-3; INDEX: 013-002-00-1)

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer

not relevant

Regulation (EU) 2019/1148 (marketing and use of explosives precursors)

NO English translation : aluminium powder (stabilised) (CAS: 7429-90-5, EINECS: 231-072-3, INDEX: 013-002-00-1)

NO English translation

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]

Hazard categories: This product is not classified according to Directive 2012/18/EU.

National regulations

This information is not available.

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Indication of changes

This safety data sheet has been completely updated

Abbreviations and acronyms

Abbreviations and acronyms	Description
ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AOX	Adsorbable Organic halogen compounds
ATE	Acute Toxicity Estimate
ATEmix	Acute Toxicity Estimate for Mixtures
BCF	Bioconcentration Factor
BLV	Biological Limit Value
BOD	Biochemical (Biological) Oxygen Demand
bw	body weight
CAS	Chemical Abstracts Service
CK	Peak concentration
CLP	Classification, Labelling and Packaging

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CMR	Carcinogenic, Mutagenic, toxic for Reproduction
CO2	Carbon dioxide
COD	Chemical Oxygen Demand
COSHH	Control of Substances Hazardous to Health
CSA	Chemical Safety Assessment
CSR	Chemical Safety Report
DGR	Dangerous Goods Regulations (IATA)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
DOC	Dissolved Organic Carbon
DU	Downstream User
EbC50	Effective Concentration 50 % reduction in biomass
EC	European Community
EC10	Effective Concentration 10%
EC50	Effective Concentration 50%
ECHA	European Chemicals Agency
EINECS	European Inventory of Existing Commercial Chemical Substances
EL50	Effective Loading 50 %
ELINCS	European Inventory of Existing Commercial Chemical Substances
EmS	emergency procedures
EN	European Standard
ErC10	Effective Concentration 10 % reduction in growth rate
ErC50	Effective Concentration 50 % reduction in growth rate
ES	Exposure Scenario
EU	European Union
EWC	European Waste Catalogue
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IATA	International Air Transport Association
IC50	Inhibition Concentration 50 %
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International nomenclature of cosmetic ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
KOC	Partition coefficient n-octanol/water
LC50	Lethal (fatal) Concentration 50%
LD50	Lethal (fatal) Dose 50%
LDL0	Lowest Lethal (fatal) Dose
LL50	Lethal Loading 50 %
LOAEC	Lowest Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest Observable Effect Concentration
LOEL	Lowest Observable Effect Level
M-factor	Multiplication factor
NOAEC	no observed adverse effect concentration
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
NOELR	No Observed Effect Level
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational exposure limit (EU)
PBT	persistent and bioaccumulative and toxic
PEC	Predicted Environmental Concentration
PEL	Permissible Exposure Limit
PNEC	Predicted No Effect Concentration
PROC	Process Category
REACH	Registration, Evaluation and Authorization of Chemicals

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RID	Dangerous goods regulations for transport by rail
SCL	Specific concentration limit
STEL	Short-term Exposure Limit
STOT	Specific Target Organ Toxicity
STP	sewage treatment plant
SU	use category
SVHC	substance of very high concern
ThCO2	Theoretical carbon dioxide amount
TLV	Threshold Limit Value
TWA	Eight-hour time-weighted average exposure limit value
UN	United Nations
VOC	Volatile organic compounds

Key literature references and sources for data

Regulation (EC) No. 1272/2008 on the classification, labelling, and packaging (Classification, Labelling and Packaging) of substances and mixtures.

Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/UE.

Guidance on the compilation of safety data sheets by ECHA

European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)

International Maritime Dangerous Goods Code (IMDG)

IATA Dangerous Goods Regulations (IATA DGR)

The ED Lists (List I: Substances identified as endocrine disruptors at EU level, List II: Substances under evaluation for endocrine disruption under an EU legislation, List III: Substances considered, by the evaluating National Authority, to have endocrine disrupting properties)

List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Classification according to Regulation (EC) No 1272/2008 [CLP]	List of relevant hazard statements and/or precautionary statements from sections 2 to 15
EUH210	Safety data sheet available on request.
oral Acute Tox. 4, H302	Harmful if swallowed.
inhalation Acute Tox. 2, H330	Fatal if inhaled.
Skin Irrit. 2, H315	Causes skin irritation.
Eye Dam. 1, H318	Causes serious eye damage.
Skin Sens. 1A, H317	May cause an allergic skin reaction.
Aquatic Acute 1, H400	Very toxic to aquatic life.
Aquatic Chronic 1, H410	Very toxic to aquatic life with long lasting effects.
oral Acute Tox. 3, H301	Toxic if swallowed.
dermal Acute Tox. 2, H310	Fatal in contact with skin.
Skin Corr. 1C, H314	Causes severe skin burns and eye damage.
Flam. Sol. 1, H228	Flammable solid.
Water-react. 2, H261	In contact with water releases flammable gases.
inhalation Acute Tox. 3, H331	Toxic if inhaled.
Eye Irrit. 2, H319	Causes serious eye irritation.
Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]	
Classification according to Regulation (EC) No 1272/2008 [CLP]	Classification procedure

Disclaimer: The information in this safety data sheet (SDS) applies only to the specified product, unless otherwise specified, for the mixture of this product and other substances, etc. Circumstances do not apply. This SDS only provides information on product safety for those who have received proper professional training. Users of this SDS must make independent judgments on the applicability of this SDS under special conditions of use. In special occasions, the writer of this SDS will not be responsible for any damage caused by using this SDS.