

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

DECOR

Date of first edition: 6/20/2025

Safety Data Sheet dated 16/09/2026 version 6

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

1.1. Product identifier

Mixture identification:

Trade name: DECOR

Trade code: 001031023

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

Recommended use: Paints/coatings - Decorative

Uses advised against: All uses other than recommended ones

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel. +39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

1.4. Emergency telephone number

European emergency phone number 112

Ireland Emergency medical information: (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.

Members of the public Number (8 am-10 pm): +353 (0)1 809 2166

Healthcare professional telephone Number (24hrs): +353 (0)1 809 2566

Malta In case of emergency call: +356 2395 2000 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

EUH208 Contains 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

EUH208 Contains 2-methylisothiazol-3(2H)-one. May produce an allergic reaction.

EUH208 Contains 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.

Dir. 2004/42/EC (VOC directive)

Interior matt walls and ceilings (Gloss < 25@60°)

EU limit value for this product (cat. A/a): 30 g/l

This product contains max 5.19 g/l VOC.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards: Contains biocidal product: C(M)IT/MIT (3:1); BIT; MIT; IPBC; The product is identified as an article treated pursuant to art. 58 of Regulation (EU) no. 528/2012 and subsequent amendments. Possible skin exposure must be avoided. Protective gloves and work clothes are required. Avoid releasing product into the environment. When washing work equipment, water must not be dispersed in the soil or on surface water

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: DECOR

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
$\geq 0.1 - < 0.15\%$	zinc oxide	CAS:1314-13-2 EC:215-222-5 Index:030-013-00-7	Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:1, M-Acute:1	01-2119463881-32
$\geq 0.05 - < 0.1\%$	3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate	CAS:55406-53-6 EC:259-627-5 Index:616-212-00-7	Acute Tox. 2, H330; Acute Tox. 4, H302; STOT RE 1, H372; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:10, M-Acute:10 Acute Toxicity Estimate: ATE - Inhalation (Dust/mist): 0.17 mg/l	
$< 0.05\%$	Quartz	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	
$< 0.036\%$	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS:2634-33-5 EC:220-120-9 Index:613-088-00-6	Acute Tox. 2, H330; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:1, M-Acute:1 Specific Concentration Limits: C $\geq 0.036\%$: Skin Sens. 1A H317 Acute Toxicity Estimate: ATE - Oral: 450mg/kg bw ATE - Inhalation (Dust/mist): 0.21mg/l	
$< 0.036\%$	bronopol (INN); 2-bromo-2-nitropropane-1,3-diol	CAS:52-51-7 EC:200-143-0 Index:603-085-00-8	STOT SE 3, H335; Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H312; Aquatic Chronic 1, H410; Acute Tox. 3, H301; Acute Tox. 3, H331, M-Chronic:10, M-Acute:100	
$< 0.01\%$	ethanediol; ethylene glycol	CAS:107-21-1 EC:203-473-3	Acute Tox. 4, H302; STOT RE 2, H373	01-2119456816-28
$< 0.0015\%$	2-octyl-2H-isothiazol-3-one	CAS:26530-20-1 EC:247-761-7 Index:613-112-00-5	Acute Tox. 2, H330; Acute Tox. 3, H311; Acute Tox. 3, H301; Skin Corr. 1, H314; Eye Dam. 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Corrosive to the respiratory tract., M-Chronic:100, M-Acute:100 Specific Concentration Limits: C $\geq 0.0015\%$: Skin Sens. 1A H317 Acute Toxicity Estimate: ATE - Oral: 125mg/kg bw ATE - Dermal: 311mg/kg bw	

<0.0015 %	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	Acute Tox. 2, H330; Acute Tox. 2, H310; Acute Tox. 3, H301; Skin Corr. 1C, H314; Eye Dam. 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:100, M-Acute:100, EUH071 Specific Concentration Limits: C ≥ 0.6%: Skin Corr. 1C H314 0.06% ≤ C < 0.6%: Skin Irrit. 2 H315 C ≥ 0.6%: Eye Dam. 1 H318 0.06% ≤ C < 0.6%: Eye Irrit. 2 H319 C ≥ 0.0015%: Skin Sens. 1A H317
<0.0015 %	Pyrithione zinc	CAS:13463-41-7 EC:236-671-3 Index:613-333-00-7	Acute Tox. 2, H330; Acute Tox. 3, H301; STOT RE 1, H372; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Repr. 1B, H360, M-Chronic:10, M-Acute:1000 Acute Toxicity Estimate: ATE - Oral: 221 mg/kg bw
<0.0015 %	2-methylisothiazol-3(2H)-one	CAS:2682-20-4 EC:220-239-6 Index:613-326-00-9	Acute Tox. 2, H330; Acute Tox. 3, H301; Acute Tox. 3, H311; Skin Corr. 1B, H314; Eye Dam. 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:1, M-Acute:10, EUH071 Specific Concentration Limits: C ≥ 0.0015%: Skin Sens. 1A H317

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

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

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

N.A.

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

N.A.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

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

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

For emergency responders:

Wear 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.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

For containment:

This product contains microplastics: do not release the product into the environment during use or disposal. Do not clean tools under running water. Do not pour product residues, water, or other washing solutions into household drains or sewers.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

This product contains microplastics: do not release the product into the environment during use or disposal. Do not clean tools under running water. Do not pour product residues, water, or other washing solutions into household drains or sewers.

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Titanium dioxide

CAS: 13463-67-7	ACGIH	Long Term: 2.5 mg/m ³ (8h) Notes: Finescale particles; R ; A3 - LRT irr, pneumoconiosis
	NATION AUSTRIA AL	Long Term: 5 mg/m ³ ; Short Term: 10 mg/m ³ Notes: 60(Miw), 2x, MAK, A Source: BGBl. II Nr. 156/2021
	NATION BELGIUM AL	Long Term: 10 mg/m ³ Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATION BULGARIA AL	Long Term: 10 mg/m ³ Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATION GERMANY AL	Long Term: 0.3 mg/m ³ ; Short Term: 2.4 mg/m ³ Notes: DFG; Long term and short term: excluding ultrafine particles; respirable fraction; multiplied by the material density;

Source: TRGS900

NATION DENMARK
AL

Long Term: 6 mg/m3
Notes: K
Source: BEK nr 2203 af 29/11/2021

NATION SPAIN
AL

Long Term: 10 mg/m3
Source: LEP 2022

NATION ESTONIA
AL

Long Term: 5 mg/m3
Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105

NATION FRANCE
AL

Long Term: 10 mg/m3
Notes: Cancérogène de catégorie 2
Source: INRS outil65

NATION GREECE
AL

Long Term: 10 mg/m3
Notes: εισπν.
Source: ΦΕΚ 94/Α` 13.5.1999

Long Term: 5 mg/m3
Notes: αναπν.
Source: ΦΕΚ 94/Α` 13.5.1999

NATION CROATIA
AL

Long Term: 10 mg/m3
Notes: U
Source: NN 1/2021

Long Term: 4 mg/m3
Notes: R
Source: NN 1/2021

NATION IRELAND
AL

Long Term: 10 mg/m3
Source: 2021 Code of Practice

Long Term: 4 mg/m3
Source: 2021 Code of Practice

NATION LITHUANIA
AL

Long Term: 5 mg/m3
Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389

NATION LATVIA
AL

Long Term: 10 mg/m3
Source: KN325P1

NATION NORWAY
AL

Long Term: 5 mg/m3
Source: FOR-2021-06-28-2248

NATION POLAND
AL

Long Term: 10 mg/m3
Notes: 4), 7)
Source: Dz.U. 2018 poz. 1286

NATION ROMANIA
AL

Long Term: 10 mg/m3; Short Term: 15 mg/m3
Source: Republicarea 1 - nr. 743 din 29 iulie 2021

NATION SLOVAKIA
AL

Long Term: 5 mg/m3
Source: 355 NARIADENIE VLÁDY z 10. mája 2006

NATION SWEDEN
AL

Long Term: 5 mg/m3
Notes: 3
Source: AFS 2021:3

SUVA SWITZERLAND
D

Long Term: 3 mg/m3
Notes: TWA mg/m3: (a), SSC, Formel / Formal, NIOSH
Source: suva.ch/valeurs-limites

Talc (Mg3H2(SiO3)4)

CAS: 14807-96-6

ACGIH

Long Term: 2 mg/m3 (8h)
Notes: Containing no asbestos fibers\$ E,R, A4 - Pulm fibrosis, pulm func

NATION AUSTRIA
AL

Long Term: 2 mg/m3
Notes: MAK, A
Source: BGBl. II Nr. 156/2021

NATION BELGIUM
AL

Long Term: 2 mg/m3
Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1

NATION DENMARK
AL

Notes: 0, 3 fiber/cm3, K
Source: BEK nr 2203 af 29/11/2021

NATION SPAIN AL	Long Term: 2 mg/m3 Notes: d, e Source: LEP 2022
NATION FINLAND AL	Notes: 8h: 0.5 kuitua/cm3 Source: HTP-ARVOT 2020 Long Term: 2 mg/m3 Notes: hengittävä pöly Source: HTP-ARVOT 2020 Long Term: 1 mg/m3 Notes: alveolijae Source: HTP-ARVOT 2020
NATION GREECE AL	Long Term: 10 mg/m3 Notes: εισπν. Source: ΦΕΚ 94/A` 13.5.1999  Long Term: 2 mg/m3 Notes: αναπν. Source: ΦΕΚ 94/A` 13.5.1999
NATION CROATIA AL	Long Term: 1 mg/m3 Notes: R Source: NN 1/2021
NATION HUNGARY AL	Long Term: 2 mg/m3 Notes: Respirable aerosol Source: 5/2020. (II. 6.) ITM
NATION IRELAND AL	Long Term: 10 mg/m3 Source: 2021 Code of Practice Long Term: 0.8 mg/m3 Source: 2021 Code of Practice
NATION LATVIA AL	Long Term: 4 mg/m3 Source: KN325P1
NATION NETHERLAND AL S	Long Term: 0.25 mg/m3 Source: Arbeidsomstandighedenregeling - Lijst A
NATION POLAND AL	Long Term: 4 mg/m3 Notes: 4) Source: Dz.U. 2018 poz. 1286 Long Term: 1 mg/m3 Notes: 6), 18) Source: Dz.U. 2018 poz. 1286
NATION ROMANIA AL	Long Term: 2 mg/m3 Notes: fracțiune respirabilă Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATION SWEDEN AL	Long Term: 2 mg/m3 Notes: 3 Source: AFS 2021:3 Long Term: 1 mg/m3 Notes: 3 Source: AFS 2021:3
SUVA SWITZERLAN D	Long Term: 3 mg/m3 Notes: TWA mg/m3: (a), SSC, Formel / Formal, OSHA Source: suva.ch/valeurs-limites

Calcium carbonate

CAS: 471-34-1

NATION FRANCE AL	Long Term: 10 mg/m3 Source: INRS outil65
NATION CROATIA AL	Long Term: 10 mg/m3 Notes: U Source: NN 1/2021 Long Term: 4 mg/m3 Notes: R Source: NN 1/2021

NATION HUNGARY AL		Long Term: 10 mg/m ³ Notes: inhalable aerosol Source: 5/2020. (II. 6.) ITM
NATION IRELAND AL		Long Term: 10 mg/m ³ Notes: Inhalable fraction Source: 2021 Code of Practice
		Long Term: 4 mg/m ³ Notes: Respirable fraction Source: 2021 Code of Practice
NATION LATVIA AL		Long Term: 6 mg/m ³ Source: KN325P1
NATION POLAND AL		Long Term: 10 mg/m ³ Notes: 4) Source: Dz.U. 2018 poz. 1286
SUVA	SWITZERLAND	Long Term: 3 mg/m ³ Notes: TWA mg/m ³ : (a), Formel / Formal, NIOSH Source: suva.ch/valeurs-limites

sodium carbonate

CAS: 497-19-8

ITA	CZECHIA	Long Term: 5 mg/m ³ (8h); Short Term: 10 mg/m ³ (15min)
NATION ROMANIA AL		Long Term: 1 mg/m ³ ; Short Term: 3 mg/m ³ Source: Republicarea 1 - nr. 743 din 29 iulie 2021

Barium sulfate

CAS: 7727-43-7

ACGIH		Long Term: 5 mg/m ³ (8h) Notes: I, E - Pneumoconiosis
NATION BELGIUM AL		Long Term: 5 mg/m ³ Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATION BULGARIA AL		Long Term: 10 mg/m ³ Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
NATION SPAIN AL		Long Term: 10 mg/m ³ Notes: e Source: LEP 2022
NATION CROATIA AL		Long Term: 10 mg/m ³ Notes: U Source: NN 1/2021
		Long Term: 4 mg/m ³ Notes: R Source: NN 1/2021
NATION IRELAND AL		Long Term: 5 mg/m ³ Source: 2021 Code of Practice
NATION SLOVAKIA AL		Long Term: 4 mg/m ³ Notes: 10) Source: 355 NARIADENIE VLÁDY z 10. mája 2006
		Long Term: 1.5 mg/m ³ Notes: 11) Source: 355 NARIADENIE VLÁDY z 10. mája 2006
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 10 mg/m ³ Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
		Long Term: 4 mg/m ³ Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
SUVA	SWITZERLAND	Long Term: 3 mg/m ³ Notes: TWA mg/m ³ : (a), Formel / Formal Source: suva.ch/valeurs-limites

Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated

CAS: 25322-68-3	NATION GERMANY AL	Long Term: 200 mg/m ³ Notes: DFG, Y, E, 2 (II) Source: TRGS 900
	NATION SLOVAKIA AL	Long Term: 1000 mg/m ³ Source: 355 NARIADENIE VLÁDY z 10. mája 2006
	SUVA SWITZERLAND D	Long Term: 500 mg/m ³ Notes: SSC, Mcorp / KG Source: suva.ch/valeurs-limites
zinc oxide		
CAS: 1314-13-2	ACGIH	Long Term: 2 mg/m ³ (8h); Short Term: 10 mg/m ³ Notes: R - Metal fume fever
	NATION AUSTRIA AL	Long Term: 5 mg/m ³ Notes: MAK, A Source: BGBl. II Nr. 156/2021
	NATION BELGIUM AL	Long Term: 2 mg/m ³ ; Short Term: 10 mg/m ³ Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATION BULGARIA AL	Long Term: 5 mg/m ³ ; Short Term: 10 mg/m ³ Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATION CZECHIA AL	Long Term: 2 mg/m ³ ; Short Term: Ceiling - 5 mg/m ³ Source: Nařízení vlády č. 361-2007 Sb
	NATION DENMARK AL	Long Term: 4 mg/m ³ Source: BEK nr 2203 af 29/11/2021
	NATION SPAIN AL	Long Term: 2 mg/m ³ ; Short Term: 10 mg/m ³ Notes: d Source: LEP 2022
	NATION ESTONIA AL	Long Term: 5 mg/m ³ Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATION FINLAND AL	Long Term: 2 mg/m ³ ; Short Term: 10 mg/m ³ Source: HTP-ARVOT 2020
	NATION FRANCE AL	Long Term: 5 mg/m ³ Source: INRS outil65
		Long Term: 10 mg/m ³ Source: INRS outil65
	NATION GREECE AL	Long Term: 5 mg/m ³ ; Short Term: 10 mg/m ³ Source: ΦΕΚ 94/Α` 13.5.1999
	NATION CROATIA AL	Long Term: 2 mg/m ³ ; Short Term: 10 mg/m ³ Notes: GVI: R Source: NN 1/2021
	NATION HUNGARY AL	Long Term: 5 mg/m ³ Notes: i, N Source: 5/2020. (II. 6.) ITM rendelet
		Long Term: 5 mg/m ³ Notes: i, R Source: 5/2020. (II. 6.) ITM rendelet
	NATION IRELAND AL	Long Term: 2 mg/m ³ ; Short Term: 10 mg/m ³ Notes: OEL (8-hour reference period) : R Source: 2021 Code of Practice
	NATION LITHUANIA AL	Long Term: 5 mg/m ³ Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
	NATION LATVIA AL	Long Term: 0.5 mg/m ³ Source: KN325P1
	NATION NORWAY AL	Long Term: 5 mg/m ³ Source: FOR-2021-06-28-2248
	NATION POLAND AL	Long Term: 5 mg/m ³ ; Short Term: 10 mg/m ³ Notes: 4) Source: Dz.U. 2018 poz. 1286

NATION ROMANIA AL	Long Term: 5 mg/m ³ ; Short Term: 10 mg/m ³ Notes: (Fumuri) Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATION SLOVAKIA AL	Long Term: 1 mg/m ³ ; Short Term: 1 mg/m ³ Notes: 11) Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATION SWEDEN AL	Long Term: 5 mg/m ³ Notes: 3 Source: AFS 2021:3
SUVA SWITZERLAND	Long Term: 3 mg/m ³ ; Short Term: 3 mg/m ³ Notes: TWA mg/m ³ : (a), Fimétal / Metallrauch, NIOSH OSHA Source: suva.ch/valeurs-limites

Magnesium carbonate

CAS: 546-93-0

NATION BELGIUM AL	Long Term: 10 mg/m ³ Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATION FRANCE AL	Long Term: 10 mg/m ³ Source: INRS outil65
NATION CROATIA AL	Long Term: 10 mg/m ³ Notes: U Source: NN 1/2021
	Long Term: 4 mg/m ³ Notes: R Source: NN 1/2021
NATION LITHUANIA AL	Long Term: 10 mg/m ³ Notes: F Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
SUVA SWITZERLAND	Long Term: 3 mg/m ³ Notes: TWA mg/m ³ : (a) Source: suva.ch/valeurs-limites

Quartz

CAS: 14808-60-7

ACGIH	Long Term: 0.025 mg/m ³ (8h) Notes: R, A2 - Pulm fibrosis, lung cancer
NATION BELGIUM AL	Long Term: 0.1 mg/m ³ Notes: C Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATION DENMARK AL	Long Term: 0.3 mg/m ³ Notes: alveolijae, liite 3 Source: BEK nr 2203 af 29/11/2021
	Long Term: 0.1 mg/m ³ Notes: EK Source: BEK nr 2203 af 29/11/2021
NATION SPAIN AL	Long Term: 0.3 mg/m ³ Notes: Respirable fraction Source: LEP 2022
NATION ESTONIA AL	Long Term: 0.1 mg/m ³ Notes: 1, C Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATION FINLAND AL	Long Term: 0.05 mg/m ³ Notes: alveolijae, liite 3 Source: HTP-ARVOT 2020
NATION FRANCE AL	Long Term: 0.1 mg/m ³ Notes: La VLEP s'applique à la fraction alvéolaire. Forme de silice cristalline. Source: INRS outil65, article R. 4412-149 du Code du travail
NATION HUNGARY AL	Long Term: 0.1 mg/m ³ Source: 5/2020. (II. 6.) ITM rendelet
NATION IRELAND AL	Long Term: 0.1 mg/m ³ Notes: Respirable fraction Source: 2021 Code of Practice

NATION ITALY AL	Long Term: 0.1 mg/m ³ Notes: Polvere di silice cristallina respirabile (frazione inalabile). Rif:D.Lgs 81/2008 Source: D.lgs. 81/2008, Allegato XLIII
NATION LITHUANIA AL	Long Term: 0.1 mg/m ³ Notes: Žiūrėti 1 priedo 3 punktą. Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATION NETHERLAND AL S	Long Term: 0.075 mg/m ³ Notes: (2) Source: Arbeidsomstandighedenregeling - Lijst B1
NATION NORWAY AL	Long Term: 0.3 mg/m ³ Notes: K 7 Source: FOR-2021-06-28-2248
	Long Term: 0.05 mg/m ³ Notes: K G 7 21 Source: FOR-2021-06-28-2248
NATION POLAND AL	Long Term: 0.1 mg/m ³ Notes: 6) Source: Dz.U. 2018 poz. 1286
NATION SWEDEN AL	Long Term: 0.1 mg/m ³ Notes: C, M, 3 Source: AFS 2021:3
SUVA SWITZERLAND D	Long Term: 0.15 mg/m ³ Notes: TWA mg/m ³ : (a), C1A, SSC, P, Cancpulm Silicose / Lugenkrebs Silikose, HSE NIOSH OSHA Source: suva.ch/valeurs-limites

3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate

CAS: 55406-53-6	NATION GERMANY AL	Long Term: 0.058 mg/m ³ - 0.005 ppm Notes: DFG, Y, Sh, 11, 2 (I) Source: TRGS 900
	NATION SLOVENIA AL	Long Term: 0.058 mg/m ³ - 0.005 ppm; Short Term: 0.116 mg/m ³ - 0.01 ppm Notes: Y Source: UL št. 72, 11. 5. 2021
	SUVA SWITZERLAND D	Long Term: 0.12 mg/m ³ - 0.01 ppm; Short Term: 0.24 mg/m ³ - 0.02 ppm Notes: S, SSC, Cholin / Cholin, La substance peut être présente sous forme de vapeur et d'aérosol en même temps / Der Stoff kann gleichzeitig als Dampf und Aerosol vorliegen Source: suva.ch/valeurs-limites

Dolomite

CAS: 16389-88-1	NATION LATVIA AL	Long Term: 6 mg/m ³ Source: KN325P1
	NATION POLAND AL	Long Term: 10 mg/m ³ Notes: 4), 7) Source: Dz.U. 2018 poz. 1286

Quartz

CAS: 14808-60-7	ACGIH	Long Term: 0.025 mg/m ³ (8h) Notes: R, A2 - Pulm fibrosis, lung cancer
	EU	Long Term: 0.1 mg/m ³ Notes: Polvere di silice cristallina respirabile, frazione inalabile. (R), A2 - Pulm fibrosis, lung cancer. Directive 2017/2398
	NATION AUSTRIA AL	Long Term: 0.05 mg/m ³ Notes: MAK, III C, A Source: BGBl. II Nr. 156/2021
	NATION BELGIUM AL	Long Term: 0.1 mg/m ³ Notes: C Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATION DENMARK AL	Long Term: 0.3 mg/m ³ Source: BEK nr 2203 af 29/11/2021
		Long Term: 0.1 mg/m ³ Notes: EK Source: BEK nr 2203 af 29/11/2021

NATION SPAIN AL	Long Term: 0.05 mg/m ³ (8h) Notes: Respirable fraction Source: LEP 2022
NATION ESTONIA AL	Long Term: 0.1 mg/m ³ Notes: 1, C Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATION FINLAND AL	Long Term: 0.05 mg/m ³ Notes: alveolijae, liite 3 Source: HTP-ARVOT 2020
NATION FRANCE AL	Long Term: 0.1 mg/m ³ Notes: La VLEP s'applique à la fraction alvéolaire. Forme de silice cristalline. Source: INRS outil65, article R. 4412-149 du Code du travail
NATION CROATIA AL	Long Term: 0.1 mg/m ³ Source: NN 1/2021
NATION HUNGARY AL	Long Term: 0.1 mg/m ³ (8h) Notes: Respirable aerosol Source: 5/2020. (II. 6.) ITM rendelet
NATION IRELAND AL	Long Term: 0.1 mg/m ³ (8h) Notes: Respirable fraction Source: 2021 Code of Practice
NATION ITALY AL	Long Term: 0.1 mg/m ³ (8h) Notes: Polvere di silice cristallina respirabile (frazione inalabile). D.Lgs 81/2008 Source: D.lgs. 81/2008, Allegato XLIII
NATION LITHUANIA AL	Long Term: 0.1 mg/m ³ Notes: Žiūrėti 1 priedo 3 punktą. Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATION NETHERLAND AL S	Long Term: 0.075 mg/m ³ Notes: (2) Source: Arbeidsomstandighedenregeling - Lijst B1
NATION NORWAY AL	Long Term: 0.3 mg/m ³ Notes: K 7 Source: FOR-2021-06-28-2248
	Long Term: 0.05 mg/m ³ Notes: K G 7 21 Source: FOR-2021-06-28-2248
NATION POLAND AL	Long Term: 0.1 mg/m ³ Notes: 6) Source: Dz.U. 2018 poz. 1286
NATION SWEDEN AL	Long Term: 0.1 mg/m ³ Notes: C, M, 3 Source: AFS 2021:3
SUVA SWITZERLAND	Long Term: 0.15 mg/m ³ Notes: TWA mg/m ³ : (a), C1A, SSC, P, Cancpulm Silicose / Lungenkrebs Silikose, HSE NIOSH OSHA Source: suva.ch/valeurs-limites

ammonia%

CAS: 1336-21-6

NATION FINLAND AL	Long Term: 14 mg/m ³ - 20 ppm; Short Term: 36 mg/m ³ - 50 ppm Source: HTP-ARVOT 2020
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Propane-1,2-diol

CAS: 57-55-6

NATION CROATIA AL	Long Term: 474 mg/m ³ - 150 ppm Source: NN 1/2021
	Long Term: 10 mg/m ³ Source: NN 1/2021
NATION IRELAND AL	Long Term: 470 mg/m ³ - 150 ppm Source: 2021 Code of Practice
	Long Term: 10 mg/m ³ Source: 2021 Code of Practice
NATION LITHUANIA AL	Long Term: 7 mg/m ³ Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389

NATION LATVIA AL	Long Term: 7 mg/m3 Source: KN325P1
NATION NORWAY AL	Long Term: 79 mg/m3 - 25 ppm Source: FOR-2021-06-28-2248
NATION POLAND AL	Long Term: 100 mg/m3 Notes: 4) Source: Dz.U. 2018 poz. 1286

Propylidynetrimethanol

CAS: 77-99-6	NATION LITHUANIA AL	Short Term: Ceiling - 5 ppm Notes: Ū Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
	NATION SWEDEN AL	Long Term: 5 mg/m3 Source: AFS 2021:3

2,2' -oxybisethanol; diethylene glycol

CAS: 111-46-6	NATION AUSTRIA AL	Long Term: 44 mg/m3 - 10 ppm; Short Term: 176 mg/m3 - 40 ppm Notes: 15(Miw), 4x, MAK Source: GKV, BGBl. II Nr. 156/2021
	NATION GERMANY AL	Long Term: 44 mg/m3 - 10 ppm Notes: DFG, Y, 11, 4(II) Source: TRGS 900
	NATION DENMARK AL	Long Term: 11 mg/m3 - 2.5 ppm Source: BEK nr 2203 af 29/11/2021
	NATION ESTONIA AL	Long Term: 45 mg/m3 - 10 ppm; Short Term: 90 mg/m3 - 20 ppm Notes: A Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATION CROATIA AL	Long Term: 101 mg/m3 - 23 ppm Source: NN 1/2021
	NATION IRELAND AL	Long Term: 100 mg/m3 - 23 ppm Source: 2021 Code of Practice
	NATION LITHUANIA AL	Long Term: 45 mg/m3 - 10 ppm; Short Term: 90 mg/m3 - 20 ppm Notes: O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
	NATION LATVIA AL	Long Term: 10 mg/m3 Source: KN325P1
	NATION POLAND AL	Long Term: 10 mg/m3 Notes: 4) Source: Dz.U. 2018 poz. 1286
	NATION ROMANIA AL	Long Term: 500 mg/m3 - 115 ppm; Short Term: 800 mg/m3 - 184 ppm Source: Republicarea 1 - nr. 743 din 29 iulie 2021
	NATION SLOVAKIA AL	Long Term: 44 mg/m3 - 10 ppm; Short Term: 90 mg/m3 - 20 ppm Source: 355 NARIADENIE VLADY z 10. mája 2006
	NATION SLOVENIA AL	Long Term: 44 mg/m3 - 10 ppm; Short Term: 176 mg/m3 - 40 ppm Notes: Y Source: UL št. 72, 11. 5. 2021
	NATION SWEDEN AL	Long Term: 45 mg/m3 - 10 ppm; Short Term: 90 mg/m3 - 20 ppm Notes: H, V Source: AFS 2021:3
WEL- EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 101 mg/m3 - 23 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
SUVA	SWITZERLAN D	Long Term: 44 mg/m3 - 10 ppm; Short Term: 176 mg/m3 - 40 ppm Notes: SSC, La substance peut être présente sous forme de vapeur et d'aérosol en même temps / Der Stoff kann gleichzeitig als Dampf und Aerosol vorliegen Source: suva.ch/valeurs-limites

Magnesium oxide

CAS: 1309-48-4	ACGIH	Long Term: 10 mg/m ³ (8h) Notes: I, A4 - URT, metal fume fever
	NATION AUSTRIA AL	Long Term: 10 mg/m ³ ; Short Term: 20 mg/m ³ Notes: 60(Miw), 2x, MAK, E Source: BGBl. II Nr. 156/2021
		Long Term: 5 mg/m ³ ; Short Term: 10 mg/m ³ Notes: 60(Miw), 2x, MAK, A Source: BGBl. II Nr. 156/2021
		Long Term: 5 mg/m ³ ; Short Term: 20 mg/m ³ Notes: 15(Miw), 4x, MAK, A Source: BGBl. II Nr. 156/2021
	NATION BELGIUM AL	Long Term: 10 mg/m ³ Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATION BULGARIA AL	Long Term: 10 mg/m ³ Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATION CZECHIA AL	Long Term: 5 mg/m ³ ; Short Term: Ceiling - 10 mg/m ³ Source: Nařízení vlády č. 361-2007 Sb
	NATION DENMARK AL	Long Term: 6 mg/m ³ Source: BEK nr 2203 af 29/11/2021
	NATION SPAIN AL	Long Term: 10 mg/m ³ Source: LEP 2022
	NATION FRANCE AL	Long Term: 10 mg/m ³ Source: INRS outil65
	NATION GREECE AL	Long Term: 10 mg/m ³ Notes: εισπν. Source: ΦΕΚ 94/Α` 13.5.1999
		Long Term: 5 mg/m ³ Notes: αναπν. Source: ΦΕΚ 94/Α` 13.5.1999
	NATION CROATIA AL	Long Term: 10 mg/m ³ Notes: U Source: NN 1/2021
		Long Term: 4 mg/m ³ Notes: R Source: NN 1/2021
	NATION HUNGARY AL	Long Term: 6 mg/m ³ Notes: resp, i, R Source: 5/2020. (II. 6.) ITM rendelet
	NATION IRELAND AL	Long Term: 10 mg/m ³ (8h); Short Term: 4 mg/m ³ Notes: Respirable fraction Inhalable fraction
		Long Term: 5 mg/m ³ (8h) Notes: Fume
		Long Term: 10 mg/m ³ (8h) Notes: Inhalable fraction
	NATION LITHUANIA AL	Long Term: 4 mg/m ³ Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
	NATION NORWAY AL	Long Term: 10 mg/m ³ Notes: 1 Source: FOR-2021-06-28-2248
	NATION POLAND AL	Long Term: 10 mg/m ³ Notes: 4) Source: Dz.U. 2018 poz. 1286
	NATION ROMANIA AL	Long Term: 5 mg/m ³ ; Short Term: 15 mg/m ³ Notes: (Fumuri) Source: Republicarea 1 - nr. 743 din 29 iulie 2021
	NATION SLOVAKIA AL	Long Term: 4 mg/m ³ Notes: 11)

Source: 355 NARIADENIE VLÁDY z 10. mája 2006

Long Term: 10 mg/m³

Notes: 10)

Source: 355 NARIADENIE VLÁDY z 10. mája 2006

SUVA SWITZERLAND
Long Term: 3 mg/m³
Notes: TWA mg/m³: (a), SSC, NIOSH
Source: suva.ch/valeurs-limites

Long Term: 3 mg/m³

Notes: TWA mg/m³: (a), NIOSH

Source: suva.ch/valeurs-limites

propan-2-ol; isopropyl alcohol; isopropanol

CAS: 67-63-0

ACGIH

Long Term: 200 ppm (8h); Short Term: 400 ppm

Notes: A4, BEI - Eye and URT irr, CNS impair

NATION AUSTRIA
AL

Long Term: 500 mg/m³ - 200 ppm; Short Term: 2000 mg/m³ - 800 ppm

Notes: 15(Miw), 4x, MAK

Source: BGBl. II Nr. 156/2021

NATION BELGIUM
AL

Long Term: 500 mg/m³ - 200 ppm; Short Term: 1000 mg/m³ - 400 ppm

Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1

NATION BULGARIA
AL

Long Term: 980 mg/m³; Short Term: 1225 mg/m³

Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.

NATION CZECHIA
AL

Long Term: 500 mg/m³; Short Term: Ceiling - 1000 mg/m³

Notes: I

Source: Nařízení vlády č. 361-2007 Sb

NATION GERMANY
AL

Long Term: 500 mg/m³ - 200 ppm

Notes: DFG, Y, 2(II)

Source: TRGS 900

NATION DENMARK
AL

Long Term: 490 mg/m³ - 200 ppm

Source: BEK nr 2203 af 29/11/2021

NATION SPAIN
AL

Long Term: 500 mg/m³ - 200 ppm; Short Term: 1000 mg/m³ - 400 ppm

Notes: VLB®, s

Source: LEP 2022

NATION ESTONIA
AL

Long Term: 350 mg/m³ - 150 ppm; Short Term: 600 mg/m³ - 250 ppm

Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105

NATION FINLAND
AL

Long Term: 500 mg/m³ - 200 ppm; Short Term: 620 mg/m³ - 250 ppm

Source: HTP-ARVOT 2020

NATION FRANCE
AL

Short Term: 980 mg/m³ - 400 ppm

Source: INRS outil65

NATION GREECE
AL

Long Term: 980 mg/m³ - 400 ppm; Short Term: 1225 mg/m³ - 500 ppm

Source: ΦΕΚ 94/Α` 13.5.1999

NATION CROATIA
AL

Long Term: 999 mg/m³ - 400 ppm; Short Term: 1250 mg/m³ - 500 ppm

Source: NN 1/2021

NATION HUNGARY
AL

Long Term: 500 mg/m³; Short Term: 1000 mg/m³

Notes: b, i, R

Source: 5/2020. (II. 6.) ITM rendelet

NATION IRELAND
AL

Long Term: 200 ppm; Short Term: 400 ppm

Notes: Sk

Source: 2021 Code of Practice

NATION LITHUANIA
AL

Long Term: 350 mg/m³ - 150 ppm; Short Term: 600 mg/m³ - 250 ppm

Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389

NATION LATVIA
AL

Long Term: 350 mg/m³; Short Term: 600 mg/m³

Source: KN325P1

NATION NORWAY
AL

Long Term: 245 mg/m³ - 100 ppm

Source: FOR-2021-06-28-2248

NATION POLAND
AL

Long Term: 900 mg/m³; Short Term: 1200 mg/m³

Notes: skóra

Source: Dz.U. 2018 poz. 1286

NATION ROMANIA AL		Long Term: 200 mg/m ³ - 81 ppm; Short Term: 500 mg/m ³ - 203 ppm Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATION SLOVAKIA AL		Long Term: 500 mg/m ³ - 200 ppm; Short Term: 1000 mg/m ³ - 400 ppm Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATION SLOVENIA AL		Long Term: 500 mg/m ³ - 200 ppm; Short Term: 1000 mg/m ³ - 400 ppm Notes: Y, BAT Source: UL št. 72, 11. 5. 2021
NATION SWEDEN AL		Long Term: 350 mg/m ³ - 150 ppm; Short Term: 600 mg/m ³ - 250 ppm Notes: V Source: AFS 2021:3
WEL- EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 999 mg/m ³ - 400 ppm; Short Term: 1250 mg/m ³ - 500 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
SUVA	SWITZERLAN D	Long Term: 500 mg/m ³ - 200 ppm; Short Term: 1000 mg/m ³ - 400 ppm Notes: SSC, B, VRS Foie SNC Yeux / OAW Laber ZNS Auge, INRS NIOSH Source: suva.ch/valeurs-limites

Kaolin

CAS: 1332-58-7

ACGIH		Long Term: 2 mg/m ³ (8h) Notes: E,R, A4 - Pneumoconiosis
NATION BELGIUM AL		Long Term: 2 mg/m ³ Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATION DENMARK AL		Long Term: 2 mg/m ³ Source: BEK nr 2203 af 29/11/2021
NATION FINLAND AL		Long Term: 2 mg/m ³ Notes: alveolijae Source: HTP-ARVOT 2020
NATION CROATIA AL		Long Term: 2 mg/m ³ Notes: R Source: NN 1/2021
NATION IRELAND AL		Long Term: 2 mg/m ³ Source: 2021 Code of Practice
NATION POLAND AL		Long Term: 10 mg/m ³ Notes: 4), 7) Source: Dz.U. 2018 poz. 1286
SUVA	SWITZERLAN D	Long Term: 3 mg/m ³ Notes: TWA mg/m ³ : (a), Fibpulm / Lungenfibrose Source: suva.ch/valeurs-limites

sodium hydroxide; caustic soda

CAS: 1310-73-2

ACGIH		Short Term: Ceiling - 2 mg/m ³ Notes: URT, eye, and skin irr
NATION AUSTRIA AL		Long Term: 2 mg/m ³ ; Short Term: Ceiling - 4 mg/m ³ Notes: 5(Mow), 8x, MAK, E Source: BGBl. II Nr. 156/2021
NATION BELGIUM AL		Long Term: 2 mg/m ³ Notes: M Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATION BULGARIA AL		Long Term: 2 mg/m ³ Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
NATION CZECHIA AL		Long Term: 1 mg/m ³ ; Short Term: Ceiling - 2 mg/m ³ Notes: I Source: Nařízení vlády č. 361-2007 Sb
NATION DENMARK AL		Short Term: Ceiling - 2 mg/m ³ Notes: L Source: BEK nr 2203 af 29/11/2021

NATION SPAIN AL	Short Term: 2 mg/m ³ Source: LEP 2022
NATION ESTONIA AL	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Notes: * Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATION FINLAND AL	Short Term: Ceiling - 2 mg/m ³ Notes: kattoarvo Source: HTP-ARVOT 2020
NATION FRANCE AL	Long Term: 2 mg/m ³ Source: INRS outil65
NATION GREECE AL	Long Term: 2 mg/m ³ ; Short Term: 2 mg/m ³ Source: ΦΕΚ 94/Α` 13.5.1999
NATION CROATIA AL	Short Term: 2 mg/m ³ Source: NN 1/2021
NATION HUNGARY AL	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Notes: m, N Source: 5/2020. (II. 6.) ITM rendelet
NATION IRELAND AL	Short Term: 2 mg/m ³ Source: 2021 Code of Practice
NATION LITHUANIA AL	Short Term: Ceiling - 2 mg/m ³ Notes: Ū Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATION LATVIA AL	Long Term: 0.5 mg/m ³ Source: KN325P1
NATION NORWAY AL	Short Term: Ceiling - 2 mg/m ³ Notes: T Source: FOR-2021-06-28-2248
NATION POLAND AL	Long Term: 0.5 mg/m ³ ; Short Term: 1 mg/m ³ Source: Dz.U. 2018 poz. 1286
NATION ROMANIA AL	Long Term: 1 mg/m ³ ; Short Term: 3 mg/m ³
NATION SLOVAKIA AL	Long Term: 2 mg/m ³ Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATION SWEDEN AL	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Notes: 3 Source: AFS 2021:3
SUVA SWITZERLAND D	Long Term: 2 mg/m ³ ; Short Term: 2 mg/m ³ Notes: TWA mg/m ³ : (i), SSC, VRS Peau Yeux / OAW Haut Auge, NIOSH OSHA Source: suva.ch/valeurs-limites

ethanediol; ethylene glycol

CAS: 107-21-1

ACGIH	Short Term: 10 mg/m ³ Notes: I, H, A4 - URT irr
EU	Long Term: 52 mg/m ³ - 20 ppm (8h); Short Term: 104 mg/m ³ - 40 ppm Notes: Skin
NATION AUSTRIA AL	Long Term: 26 mg/m ³ - 10 ppm; Short Term: Ceiling - 52 mg/m ³ - 20 ppm Notes: 5(Mow), 8x, MAK, H Source: BGBl. II Nr. 156/2021
NATION BELGIUM AL	Long Term: 52 mg/m ³ - 20 ppm; Short Term: 104 mg/m ³ - 40 ppm Notes: D, M Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATION BULGARIA AL	Long Term: 52 mg/m ³ - 20 ppm; Short Term: 104 mg/m ³ - 40 ppm Notes: Кожа Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
NATION CYPRUS AL	Long Term: 52 mg/m ³ - 20 ppm; Short Term: 104 mg/m ³ - 40 ppm Notes: δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021

NATION CZECHIA AL	Long Term: 50 mg/m3; Short Term: Ceiling - 100 mg/m3 Notes: D Source: Nařízení vlády č. 361-2007 Sb
NATION GERMANY AL	Long Term: 26 mg/m3 - 10 ppm Notes: DFG, EU, H, Y, 11, 2(I) Source: TRGS 900
NATION DENMARK AL	Long Term: 26 mg/m3 - 10 ppm Notes: EH Source: BEK nr 2203 af 29/11/2021 Long Term: 10 mg/m3 Source: BEK nr 2203 af 29/11/2021
NATION SPAIN AL	Long Term: 52 mg/m3 - 20 ppm; Short Term: 104 mg/m3 - 40 ppm Notes: vía dérmica, VLI Source: LEP 2022
NATION ESTONIA AL	Long Term: 52 mg/m3 - 20 ppm; Short Term: 104 mg/m3 - 40 ppm Notes: A, 18 Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATION FINLAND AL	Long Term: 50 mg/m3 - 20 ppm; Short Term: 100 mg/m3 - 40 ppm Notes: iho Source: HTP-ARVOT 2020
NATION FRANCE AL	Long Term: 52 mg/m3 - 20 ppm; Short Term: 104 mg/m3 - 40 ppm Notes: Risque de pénétration percutanée Source: INRS outil65, arrêté du 30-06-2004 modifié
NATION GREECE AL	Long Term: 125 mg/m3 - 50 ppm; Short Term: 125 mg/m3 - 50 ppm Source: ΦΕΚ 94/Α` 13.5.1999
NATION HUNGARY AL	Long Term: 52 mg/m3; Short Term: 104 mg/m3 Notes: b, i, EU1, N Source: 5/2020. (II. 6.) ITM rendelet
NATION IRELAND AL	Long Term: 52 mg/m3 - 20 ppm; Short Term: 104 mg/m3 - 40 ppm Notes: Sk, IOELV Source: 2021 Code of Practice
NATION ITALY AL	Long Term: 52 mg/m3 - 20 ppm; Short Term: 104 mg/m3 - 40 ppm Notes: Cute Source: D.lgs. 81/2008, Allegato XXXVIII
NATION LITHUANIA AL	Long Term: 25 mg/m3 - 10 ppm; Short Term: 50 mg/m3 - 20 ppm Notes: O, Šis RD taikomas bendrai garų ir aerozolio koncentracijai. Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATION LUXEMBOUR AL G	Long Term: 52 mg/m3 - 20 ppm; Short Term: 104 mg/m3 - 40 ppm Notes: Peau Source: Mémorial A n.226 du 22 mars 2021
NATION LATVIA AL	Long Term: 52 mg/m3 - 20 ppm; Short Term: 104 mg/m3 - 40 ppm Notes: Āda Source: KN325P1
NATION MALTA AL	Long Term: 52 mg/m3 - 20 ppm; Short Term: 104 mg/m3 - 40 ppm Notes: skin Source: S.L.424.24
NATION NETHERLAND AL S	Long Term: 52 mg/m3; Short Term: 104 mg/m3 Notes: H Source: Arbeidsomstandighedenregeling - Lijst A Long Term: 10 mg/m3; Short Term: 104 mg/m3 Notes: H Source: Arbeidsomstandighedenregeling - Lijst A
NATION NORWAY AL	Long Term: 52 mg/m3 - 20 ppm; Short Term: 104 mg/m3 - 40 ppm Notes: H E 5 S Source: FOR-2021-06-28-2248
NATION POLAND AL	Long Term: 15 mg/m3; Short Term: 50 mg/m3 Notes: skóra Source: Dz.U. 2018 poz. 1286
NATION PORTUGAL AL	Long Term: 52 mg/m3 - 20 ppm; Short Term: 104 mg/m3 - 40 ppm Notes: Cutânea

Source: Decreto-Lei n.º 1/2021

NATION ROMANIA
AL Long Term: 52 mg/m³ - 20 ppm; Short Term: 104 mg/m³ - 40 ppm
Notes: P, Dir. 2000/39
Source: Republicarea 1 - nr. 743 din 29 iulie 2021

NATION SLOVAKIA
AL Long Term: 52 mg/m³ - 20 ppm; Short Term: 104 mg/m³ - 40 ppm
Notes: K
Source: 355 NARIADENIE VLÁDY z 10. mája 2006

NATION SLOVENIA
AL Long Term: 52 mg/m³ - 20 ppm; Short Term: 104 mg/m³ - 40 ppm
Notes: K, Y, EU1
Source: UL št. 72, 11. 5. 2021

NATION SWEDEN
AL Long Term: 25 mg/m³ - 10 ppm; Short Term: 104 mg/m³ - 40 ppm
Notes: H, 26
Source: AFS 2021:3

WEL- UNITED
EH40 KINGDOM OF Long Term: 10 mg/m³
Notes: Sk
Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
GREAT
BRITAIN AND
NORTHERN
IRELAND

Long Term: 52 mg/m³ - 20 ppm; Short Term: 104 mg/m³ - 40 ppm
Notes: Sk
Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)

SUVA SWITZERLAN Long Term: 26 mg/m³ - 10 ppm; Short Term: 52 mg/m³ - 20 ppm
D Notes: R/H, SSC, VRS Yeux / OAW Auge, La substance peut être présente sous forme de vapeur et d'aérosol en même temps / Der Stoff kann gleichzeitig als Dampf und Aerosol vorliegen
Source: suva.ch/valeurs-limites

2-octyl-2H-isothiazol-3-one

CAS: 26530-20-1 NATION AUSTRIA Long Term: 0.05 mg/m³; Short Term: Ceiling - 0.05 mg/m³
AL Notes: Mow, MAK, H, S, E
Source: BGBl. II Nr. 156/2021

NATION GERMANY Long Term: 0.05 mg/m³
AL Notes: DFG, H, Y, E, 2(I)
Source: TRGS 900

NATION SLOVENIA Long Term: 0.05 mg/m³; Short Term: 0.1 mg/m³
AL Notes: K, Y, (I)
Source: UL št. 72, 11. 5. 2021

SUVA SWITZERLAN Long Term: 0.05 mg/m³; Short Term: 0.1 mg/m³
D Notes: TWA mg/m³: (i), R/H, S, VRS / OAW
Source: suva.ch/valeurs-limites

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

CAS: 55965-84-9 NATION AUSTRIA Long Term: 0.05 mg/m³
AL Notes: MAK, Sh
Source: GKV, BGBl. II Nr. 156/2021

NATION GERMANY Long Term: 0.2 mg/m³; Short Term: 0.4 mg/m³
AL Notes: DFG; Long term and short term: inhalable fraction
Source: TRGS900

SUVA SWITZERLAN Long Term: 0.2 mg/m³; Short Term: 0.4 mg/m³
D Notes: TWA mg/m³: (i), S, SSC, VRS Peau Yeux / OAW Haut Auge
Source: suva.ch/valeurs-limites

2-methylisothiazol-3(2H)-one

CAS: 2682-20-4 NATION AUSTRIA Long Term: 0.05 mg/m³
AL Notes: MAK, Sh
Source: GKV, BGBl. II Nr. 156/2021

NATION SLOVENIA Long Term: 0.05 mg/m³ (8h)
AL

Benzyl acetate

CAS: 140-11-4 ACGIH Long Term: 10 ppm (8h)
Notes: A4 - URT irr

NATION BELGIUM AL	Long Term: 62 mg/m3 - 10 ppm Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATION DENMARK AL	Long Term: 61 mg/m3 - 10 ppm Source: BEK nr 2203 af 29/11/2021
NATION SPAIN AL	Long Term: 62 mg/m3 - 10 ppm Source: LEP 2022
NATION IRELAND AL	Long Term: 10 ppm Source: 2021 Code of Practice
NATION LITHUANIA AL	Long Term: 5 mg/m3 Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATION LATVIA AL	Long Term: 5 mg/m3 Source: KN325P1
NATION ROMANIA AL	Long Term: 50 mg/m3 - 8 ppm; Short Term: 80 mg/m3 - 13 ppm Source: Republicarea 1 - nr. 743 din 29 iulie 2021

octamethylcyclotetrasiloxane

CAS: 556-67-2	NATION AUSTRIA AL	Notes: f Source: BGBl. II Nr. 156/2021
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2,6-di-tert-butyl-p-cresol

CAS: 128-37-0	ACGIH	Long Term: 2 mg/m3 (8h) Notes: IFV, A4 - URT irr
	NATION AUSTRIA AL	Long Term: 10 mg/m3 Notes: MAK Source: GKV, BGBl. II Nr. 156/2021
	NATION BELGIUM AL	Long Term: 2 mg/m3 Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATION BULGARIA AL	Long Term: 10 mg/m3; Short Term: 50 mg/m3 Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATION GERMANY AL	Long Term: 10 mg/m3 Notes: DFG, Y, 11, E, 4 (II) Source: TRGS 900
	NATION DENMARK AL	Long Term: 10 mg/m3 Source: BEK nr 2203 af 29/11/2021
	NATION SPAIN AL	Long Term: 10 mg/m3 Source: LEP 2022
	NATION FINLAND AL	Long Term: 10 mg/m3; Short Term: 20 mg/m3 Source: HTP-ARVOT 2020
	NATION FRANCE AL	Long Term: 10 mg/m3 Source: INRS outil65
	NATION GREECE AL	Long Term: 10 mg/m3 Source: ΦΕΚ 94/Α` 13.5.1999
	NATION CROATIA AL	Long Term: 10 mg/m3 Source: NN 1/2021
	NATION IRELAND AL	Long Term: 2 mg/m3 Source: 2021 Code of Practice
	NATION SLOVENIA AL	Long Term: 10 mg/m3; Short Term: 40 mg/m3 Notes: Y, (I) Source: UL št. 72, 11. 5. 2021
WEL- EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 10 mg/m3 Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
SUVA	SWITZERLAN D	Long Term: 10 mg/m3; Short Term: 40 mg/m3 Notes: TWA mg/m3: (i), C1#B, SSC, Foie / Leber, Pas de risque accru de cancer si la VME est respectée. La substance peut être présente sous forme de vapeur et d'aérosol en même temps / Kein erhöhtes Krebsrisiko bei Einhalten des MAK-Werts. Der Stoff kann gleichzeitig als Dampf und

Pyridine-2-thiol 1-oxide, sodium salt

CAS: 3811-73-2	NATION AUSTRIA AL	Long Term: 1 mg/m ³ ; Short Term: 4 mg/m ³ Notes: 15(Miw), 4x, MAK, H Source: BGBl. II Nr. 156/2021
	NATION GERMANY AL	Long Term: 0.2 mg/m ³ Notes: DFG, H, Y, E, 2(II) Source: TRGS 900
	NATION DENMARK AL	Long Term: 1 mg/m ³ Notes: H Source: BEK nr 2203 af 29/11/2021
	NATION SLOVENIA AL	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Notes: K, (I) Source: UL št. 72, 11. 5. 2021
	SUVA SWITZERLAN D	Long Term: 0.2 mg/m ³ ; Short Term: 0.4 mg/m ³ Notes: TWA mg/m ³ : (i), R/H, SSC, SNP / PNS Source: suva.ch/valeurs-limites

Predicted No Effect Concentration (PNEC) values

3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate

CAS: 55406-53-6	Exposure Route: Fresh Water; PNEC Limit: 500 ng/l
	Exposure Route: Intermittent releases (fresh water); PNEC Limit: 530 ng/l
	Exposure Route: Marine water; PNEC Limit: 46 ng/l
	Exposure Route: Intermittent releases (marine water); PNEC Limit: 530 ng/l
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 440 ng/l
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 440 ng/l

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one

CAS: 2634-33-5	Exposure Route: Fresh Water; PNEC Limit: 4.03 mg/m ³
	Exposure Route: Intermittent releases (fresh water); PNEC Limit: 1.1 mg/m ³
	Exposure Route: Marine water; PNEC Limit: 403 ng/l
	Exposure Route: Intermittent releases (marine water); PNEC Limit: 110 ng/l
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 1.03 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 49.9 µg/kg
	Exposure Route: Marine water sediments; PNEC Limit: 4.99 µg/kg
	Exposure Route: Soil; PNEC Limit: 3 mg/kg

bronopol (INN); 2-bromo-2-nitropropane-1,3-diol

CAS: 52-51-7	Exposure Route: Fresh Water; PNEC Limit: 10 mg/m ³
	Exposure Route: Intermittent releases (fresh water); PNEC Limit: 2.5 mg/m ³
	Exposure Route: Marine water; PNEC Limit: 800 ng/l
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 430 mg/m ³
	Exposure Route: Freshwater sediments; PNEC Limit: 41 mg/m ³
	Exposure Route: Marine water sediments; PNEC Limit: 3.28 µg/kg
	Exposure Route: Soil; PNEC Limit: 500 µg/kg

ethanediol; ethylene glycol

CAS: 107-21-1	Exposure Route: Fresh Water; PNEC Limit: 10 mg/l
	Exposure Route: Intermittent releases (fresh water); PNEC Limit: 10 mg/l
	Exposure Route: Marine water; PNEC Limit: 1 mg/l
	Exposure Route: Intermittent releases (marine water); PNEC Limit: 10 mg/l
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 199.5 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 37 mg/kg
	Exposure Route: Marine water sediments; PNEC Limit: 3.7 mg/kg
	Exposure Route: Soil; PNEC Limit: 1.53 mg/kg

2-octyl-2H-isothiazol-3-one

CAS: 26530-20-1	Exposure Route: Fresh Water; PNEC Limit: 2.2 mg/m ³
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Exposure Route: Intermittent releases (fresh water); PNEC Limit: 1.22 mg/m³
Exposure Route: Marine water; PNEC Limit: 220 ng/l
Exposure Route: Intermittent releases (marine water); PNEC Limit: 122 ng/l
Exposure Route: Freshwater sediments; PNEC Limit: 47.5 µg/kg
Exposure Route: Marine water sediments; PNEC Limit: 47.5 µg/kg
Exposure Route: Soil; PNEC Limit: 8.2 µg/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 Exposure Route: Fresh Water; PNEC Limit: 3.39 mg/m³
Exposure Route: Intermittent releases (fresh water); PNEC Limit: 3.39 mg/m³
Exposure Route: Marine water; PNEC Limit: 3.39 mg/m³
Exposure Route: Intermittent releases (marine water); PNEC Limit: 3.39 mg/m³
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 230 mg/m³
Exposure Route: Freshwater sediments; PNEC Limit: 27 mg/m³
Exposure Route: Marine water sediments; PNEC Limit: 27 mg/m³
Exposure Route: Soil; PNEC Limit: 10 mg/m³

Pyrithione zinc

CAS: 13463-41-7 Exposure Route: Fresh Water; PNEC Limit: 90 ng/l
Exposure Route: Marine water; PNEC Limit: 90 ng/l
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 10 mg/m³
Exposure Route: Freshwater sediments; PNEC Limit: 9.5 µg/kg
Exposure Route: Marine water sediments; PNEC Limit: 9.5 µg/kg
Exposure Route: Soil; PNEC Limit: 1.02 mg/kg

2-methylisothiazol-3(2H)-one

CAS: 2682-20-4 Exposure Route: Fresh Water; PNEC Limit: 3.39 mg/m³
Exposure Route: Intermittent releases (fresh water); PNEC Limit: 3.39 mg/m³
Exposure Route: Marine water; PNEC Limit: 3.39 mg/m³
Exposure Route: Intermittent releases (marine water); PNEC Limit: 3.39 mg/m³
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 230 mg/m³
Exposure Route: Soil; PNEC Limit: 47.1 µg/kg

Derived No Effect Level (DNEL) values

3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate

CAS: 55406-53-6 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 23 µg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 70 µg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 1.16 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 1.16 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 2 mg/kg

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one

CAS: 2634-33-5 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 6.81 mg/kg/day; Consumer: 1.2 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 966 µg/kg; Consumer: 345 µg/kg

bronopol (INN); 2-bromo-2-nitropropane-1,3-diol

CAS: 52-51-7 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 4.1 mg/kg/day; Consumer: 1.2 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 12.3 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects

Worker Professional: 4.2 mg/kg/day; Consumer: 1.3 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 4.2 mg/kg/day; Consumer: 1.3 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 2.3 mg/kg; Consumer: 1.4 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects
Worker Professional: 7 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 350 µg/kg

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
Consumer: 1.1 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, local effects
Worker Professional: 0.013 mg/cm²; Consumer: 0.008 mg/cm²

Exposure Route: Human Dermal; Exposure Frequency: Short Term, local effects
Worker Professional: 0.013 mg/cm²; Consumer: 0.008 mg/cm²

ethanediol; ethylene glycol

CAS: 107-21-1 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 35 mg/kg/day; Consumer: 7 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 106 mg/kg; Consumer: 53 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 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 20 µg/m³; Consumer: 20 µg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 40 µg/m³; Consumer: 20 µg/m³

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 90 µg/kg

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
Consumer: 110 µg/kg

Pyrrithione zinc

CAS: 13463-41-7 Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 10 µg/kg

2-methylisothiazol-3(2H)-one

CAS: 2682-20-4 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 21 µg/m³; Consumer: 21 µg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 43 µg/m³; Consumer: 43 µg/m³

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 27 µg/kg

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
Consumer: 53 µg/kg

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.(EN166)

Protection for skin:

Chemical protection clothing. Safety shoes.

Protection for hands:

Nitrile rubber .

Respiratory protection:

N.A.

Thermal Hazards:

Not expected if used as intended

Environmental exposure controls:

This product contains microplastics: do not release the product into the environment during use or disposal. Do not clean tools

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	In compliance with the product description
Odour:	Odourless
pH:	>8.40<8.80
Kinematic viscosity:	Not Relevant Notes: Not determined, as it is not required for CLP classification
Melting point/freezing point:	N.A.
Boiling point or initial boiling point and boiling range:	N.A.
Flash point:	> 93°C
Lower and upper explosion limit:	Not Relevant Notes: Not applicable as the mixture is not flammable
Relative vapour density:	N.A.
Vapour pressure:	N.A.
Density and/or relative density:	1.26 g/cm ³
Solubility in water:	Miscible
Solubility in oil:	Not Relevant Notes: Not determined, as it is not required for CLP classification
Partition coefficient n-octanol/water (log value):	Not Relevant Notes: Not applicable to mixtures
Auto-ignition temperature:	Not Relevant Notes: Not applicable as the mixture is not flammable
Decomposition temperature:	Not Relevant Notes: Not applicable, as the mixture is not self-reactive
Flammability:	Not Relevant Notes: Not applicable as the mixture is not flammable
Volatile Organic compounds - VOCs =	0.41%; 5.19g/L
Particle characteristics:	
Particle size:	N.A.

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Toxicological Information of the Preparation

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified Based on available data, the classification criteria are not met
c) serious eye damage/irritation	Not classified Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	Not classified Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

zinc oxide

CAS: 1314-13-2	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg LC50 Inhalation Rat > 5.7 mg/l 4h LD50 Skin Rat > 2000 mg/kg 24h
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative
	c) serious eye damage/irritation	Eye Irritant Rabbit No
	d) respiratory or skin sensitisation	Skin Sensitization Guinea pig Negative
	f) carcinogenicity	Genotoxicity Negative
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 7.2 mg/kg

3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate

CAS: 55406-53-6	a) acute toxicity	ATE - Inhalation (Dust/mist): 0.17 mg/l LD50 Oral Rat = 1056 mg/kg LC50 Inhalation Dust Rat > 6.89 mg/l 4h LD50 Skin Rabbit > 2000 mg/kg 24h
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes
	f) carcinogenicity	Genotoxicity Negative Carcinogenicity Oral Negative
	g) reproductive toxicity	Reproductive Toxicity Oral Rat Negative

Quartz

CAS: 14808-60-7	Generic information:	Informazione tossicologia a livello di sostanza
	a) acute toxicity	LD50 Oral > 2000 mg/kg

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one

CAS: 2634-33-5	a) acute toxicity	ATE - Oral: 450 mg/kg bw ATE - Inhalation (Dust/mist): 0.21 mg/l
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	LD50 Oral Rat = 670 mg/kg
	LD50 Skin Rat > 2000 mg/kg
b) skin corrosion/irritation	Skin Irritant Rabbit Negative
c) serious eye damage/irritation	Eye Corrosive Positive
d) respiratory or skin sensitisation	Skin Sensitization Guineapig Positive
f) carcinogenicity	Genotoxicity Rat Negative
g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 112 mg/kg

bronopol (INN); 2-bromo-2-nitropropane-1,3-diol

CAS: 52-51-7	a) acute toxicity	LD50 Oral Rat = 305 mg/kg LC50 Inhalation of aerosol Rat >= 0.59 mg/l 4h LD50 Skin Rat > 2000 mg/kg 24h
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive 4h
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative
	f) carcinogenicity	Genotoxicity Negative Carcinogenicity Oral Rat Negative
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat 200

ethanediol; ethylene glycol

CAS: 107-21-1	a) acute toxicity	LD50 Oral Rat = 7712 mg/kg LC50 Inhalation of aerosol Rat > 2.5 mg/l 6h LD50 Skin Mouse > 3500 mg/kg
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative
	c) serious eye damage/irritation	Eye Irritant Rabbit No 24h
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative
	f) carcinogenicity	Genotoxicity Rat Negative Carcinogenicity Negative
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat > 1000 mg/kg

2-octyl-2H-isothiazol-3-one

CAS: 26530-20-1	a) acute toxicity	ATE - Oral: 125 mg/kg bw ATE - Dermal: 311 mg/kg bw LD50 Oral Rat = 125 mg/kg LC50 Inhalation Mist Rat = 0.27 mg/l 4h LD50 Skin Rabbit = 311 mg/kg
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Positive

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

CAS: 55965-84-9	a) acute toxicity	LD50 Oral Rat = 69 mg/kg LD50 Skin Rabbit = 141 mg/kg LC50 Inhalation Rat = 0.33 mg/l 4h
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive
	c) serious eye damage/irritation	Eye Corrosive Rabbit Positive
	d) respiratory or skin sensitisation	Skin Sensitization Positive

- | | |
|--------------------------|--|
| f) carcinogenicity | Genotoxicity Negative
Carcinogenicity Skin Negative |
| g) reproductive toxicity | No Observed Adverse Effect Level Oral Rat = 22.7 mg/kg |

Pyrithione zinc

- | | | |
|-----------------|--------------------------------------|--|
| CAS: 13463-41-7 | a) acute toxicity | ATE - Oral: 221 mg/kg bw
LD50 Oral Rat = 269 mg/kg
LC50 Inhalation Dust Rat = 0.14 mg/l 4h
LD50 Skin Rat > 2000 mg/kg 24h |
| | b) skin corrosion/irritation | Skin Irritant Rabbit Negative 4h |
| | c) serious eye damage/irritation | Eye Irritant Rabbit Yes |
| | d) respiratory or skin sensitisation | Skin Sensitization Guineapig Negative |
| | f) carcinogenicity | Genotoxicity Negative
Carcinogenicity Oral Rat = 0.5 mg/kg
Carcinogenicity Skin = 5 mg/kg |
| | g) reproductive toxicity | No Observed Adverse Effect Level Oral Rat = 1.4 mg/kg |

2-methylisothiazol-3(2H)-one

- | | | |
|----------------|--------------------------------------|--|
| CAS: 2682-20-4 | a) acute toxicity | LC50 Inhalation of aerosol Rat = 0.1 mg/l 4h
LD50 Oral Rat = 120 mg/kg
LD50 Skin Rat = 242 mg/kg 24h |
| | b) skin corrosion/irritation | Skin Corrosive Rabbit Positive 4h |
| | c) serious eye damage/irritation | Eye Corrosive Rabbit Positive |
| | d) respiratory or skin sensitisation | Skin Sensitization Guineapig Positive |
| | f) carcinogenicity | Genotoxicity Rat Negative
Carcinogenicity Oral Rat Negative |
| | g) reproductive toxicity | Reproductive Toxicity Oral Rat = 200 Ppm |

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Harmful to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of Eco-Toxicological properties of the components

zinc oxide

- | | | |
|----------------|------------------------------|---|
| CAS: 1314-13-2 | a) Aquatic acute toxicity: | LC50 Fish Oncorhynchus Mykiss = 0.169 mg/L 96h |
| | b) Aquatic chronic toxicity: | NOEC Fish Cyprinodontidae, Cyprinidae, Salmonidae and Cottidae = 0.044 mg/L |
| | a) Aquatic acute toxicity: | EC50 Ceriodaphnia dubia = 0.147 mg/L |
| | b) Aquatic chronic toxicity: | NOEC aquatic invertebrates = 0.014 mg/L |
| | a) Aquatic acute toxicity: | IC50 Algae Selenastrum capricornutum = 0.136 mg/L |
| | b) Aquatic chronic toxicity: | NOEC Algae = 0.06 mg/L |
| | c) Bacteria toxicity: | NOEC Sludge activated sludge = 100 µg/L |
| | d) Terrestrial toxicity: | EC10 Worm Lumbricus terrestris = 1634 mg/kg |
| | d) Terrestrial toxicity: | EC10 Folsomia candida = 14.6 mg/kg |

3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate

CAS: 55406-53-6 a) Aquatic acute toxicity: LC50 Fish Sheaphshed minnow = 0.067 mg/L 96h
 b) Aquatic chronic toxicity: NOEC Fish Pimephales promelas = 8.4 µg/L
 a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 0.645 mg/L 48h
 b) Aquatic chronic toxicity: NOEC Daphnia Daphnia magna = 49.9 µg/L
 a) Aquatic acute toxicity: LC50 Algae Desmodesmus subspicatus = 53 µg/L 72h
 a) Aquatic acute toxicity: LC50 Sludge activated sludge = 44 mg/L 3h
 e) Plant toxicity: LC50 Avena sativa = 4.92 mg/kg

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one

CAS: 2634-33-5 a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss = 2.15 mg/L 96h
 a) Aquatic acute toxicity: EC50 Daphnia Daphnia magna = 2.9 mg/L 48h
 a) Aquatic acute toxicity: EC50 Algae green alga Selenastrum capricornutum freshwater algae = 110 µg/L
 d) Terrestrial toxicity: EC50 Worm Eisenia fetida > 410.6 mg/kg
 d) Terrestrial toxicity: EC10 soil microorganisms = 263.7 mg/kg
 a) Aquatic acute toxicity: NOEC Sludge activated sludge 10.3 mg/L 3h
 e) Plant toxicity: LC50 Triticum aestivum = 200 mg/kg

bronopol (INN); 2-bromo-2-nitropropane-1,3-diol

CAS: 52-51-7 a) Aquatic acute toxicity: LC50 Fish Lepomis macrochirus = 37.5 mg/L 96h
 b) Aquatic chronic toxicity: NOEC Fish Oncorhynchus mykiss = 21.5 mg/L
 a) Aquatic acute toxicity: EC50 Daphnia Daphnia magna = 1.4 mg/L 48h
 b) Aquatic chronic toxicity: NOEC Daphnia Daphnia magna = 0.27 mg/L
 a) Aquatic acute toxicity: NOEC Algae Skeletonema costatum = 0.08 mg/L 72h
 a) Aquatic acute toxicity: EC20 Sludge activated sludge = 2 mg/L
 d) Terrestrial toxicity: LC50 Worm Eisenia foetida > 500 mg/kg
 d) Terrestrial toxicity: EC50 soil microorganisms = 679 mg/kg

ethanediol; ethylene glycol

CAS: 107-21-1 a) Aquatic acute toxicity: LC50 Fish Pimephales promelas = 72860 mg/L 96h
 b) Aquatic chronic toxicity: NOEC Fish = 15380 mg/L
 b) Aquatic chronic toxicity: NOEC Ceriodaphnia dubia = 8590 mg/L
 a) Aquatic acute toxicity: NOEC Algae Pseudokirchnerella subcapitata = 100 mg/L 72h

2-octyl-2H-isothiazol-3-one

CAS: 26530-20-1 a) Aquatic acute toxicity: LC50 Fish freshwater fish = 0.122 mg/L
 b) Aquatic chronic toxicity: EC10 Fish = 0.022 mg/L
 a) Aquatic acute toxicity: EC50 freshwater invertebrates = 0.181 mg/L
 b) Aquatic chronic toxicity: EC10 freshwater invertebrates = 0.035 mg/L
 LC50 Algae freshwater algae = 0.15 mg/L

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

CAS: 55965-84-9 a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss = 0.19 mg/L 96h
 b) Aquatic chronic toxicity: NOEC Fish Danio rerio = 0.02 mg/L
 a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 0.16 mg/L 48h
 b) Aquatic chronic toxicity: NOEC Daphnia Daphnia magna = 0.1 mg/L
 a) Aquatic acute toxicity: EC50 Algae Skeletonema costatum = 0 mg/L 96h
 a) Aquatic acute toxicity: EC50 Sludge activated sludge = 4.5 mg/L 3h
 d) Terrestrial toxicity: LC50 Worm Eisenia fetida = 613 mg/kg
 e) Plant toxicity: NOEC Trifolium pratense, Oryza sativa, Brassica napus = 1000 mg/L

Pyrithione zinc

CAS: 13463-41-7 a) Aquatic acute toxicity: LC50 Fish Pimephales promelas = 2.6 µg/L 96h
 a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 8.2 µg/L
 a) Aquatic acute toxicity: EC50 Algae Navicula pelliculosa = 3 µg/L
 b) Aquatic chronic toxicity: NOEC Fish Pimephales promelas = 1.22 µg/L
 b) Aquatic chronic toxicity: EC50 Lemna gibba = 9.6 µg/L
 d) Terrestrial toxicity: LC50 Folsomia candida = 822 mg/kg

- e) Plant toxicity: NOEC Tomato, Cucumber, Lettuce, Soybean, Cabbage, Carrot, Oat > 0.49 µg/L
- d) Terrestrial toxicity: LC50 Avian Northern Bobwhite = 60 mg/kg
- d) Terrestrial toxicity: NOEC Avian Northern Bobwhite = 31.2 mg/kg

2-methylisothiazol-3(2H)-one

- CAS: 2682-20-4
- a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss = 4.77 mg/L 96h
 - b) Aquatic chronic toxicity: NOEC Fish Oncorhynchus mykiss = 4.93 mg/L
 - a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 0.93 mg/L 48h
 - b) Aquatic chronic toxicity: EC10 Daphnia Daphnia magna = 0.04 mg/L
 - a) Aquatic acute toxicity: EC50 Algae Selenastrum capricornutum = 0.1 mg/L 72h
 - a) Aquatic acute toxicity: EC50 Sludge activated sludge of a predominantly domestic sewage = 41 mg/L 3h
 - b) Aquatic chronic toxicity: EC50 freshwater sediment = 50 mg/kg

12.2. Persistence and degradability

3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate

CAS: 55406-53-6 Non-readily biodegradable Test: Oxygen consumption
Notes: EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test)

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one

CAS: 2634-33-5 Non-readily biodegradable Test: CO2 production
Notes: OECD Guideline 301C

bronopol (INN); 2-bromo-2-nitropropane-1,3-diol

CAS: 52-51-7 Readily biodegradable Notes: OECD guideline 301B

ethanediol; ethylene glycol

CAS: 107-21-1 Readily biodegradable Test: Dissolved organic carbon; Value: 90
Notes: 10days

2-octyl-2H-isothiazol-3-one

CAS: 26530-20-1 Non-readily biodegradable

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

CAS: 55965-84-9 Non-readily biodegradable

Pyrithione zinc

CAS: 13463-41-7 Non-readily biodegradable Test: CO2 production
Notes: OECD 301B CO2 evolution

2-methylisothiazol-3(2H)-one

CAS: 2682-20-4 Non-readily biodegradable Test: CO2 production
Notes: OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

12.3. Bioaccumulative potential

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one

CAS: 2634-33-5 Bioaccumulative Test: BCF - Bioconcentration factor; Value: 6.62

bronopol (INN); 2-bromo-2-nitropropane-1,3-diol

CAS: 52-51-7 Bioaccumulative Test: BCF - Bioconcentration factor

2-octyl-2H-isothiazol-3-one

CAS: 26530-20-1 Bioaccumulative Test: BCF - Bioconcentration factor; Value: 19.21
Notes: L/kg ww

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

CAS: 55965-84-9 Bioaccumulative Test: BCF - Bioconcentration factor; Value: 54
Notes: ≤ 54

Pyrithione zinc

CAS: 13463-41-7 Bioaccumulative Test: BCF - Bioconcentration factor; Value: 1.4

2-methylisothiazol-3(2H)-one

CAS: 2682-20-4 Bioaccumulative Test: BCF - Bioconcentration factor; Value: 5.75
Notes: carcass

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessmentNo PBT or vPvB substances present in concentration $\geq 0.1\%$ **12.6. Endocrine disrupting properties**No endocrine disruptor substances present in concentration $\geq 0.1\%$ **12.7. Other adverse effects**

N.A.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Recover if possible. In so doing, comply with the local and national regulations currently in force.

The product disposed of as such, pursuant to Regulation (EU) 1357/2014, must be classified as hazardous waste

A waste code according to the European List of Wastes (LoW) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

N.A.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

N/A

14.2. UN proper shipping name

ADR-Shipping Name: N/A

IATA-Shipping Name: N/A

IMDG-Shipping Name: N/A

14.3. Transport hazard class(es)

ADR-Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

14.4. Packing group

ADR-Packing Group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: N/A

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: N/A

ADR - Hazard identification number: N/A

ADR-Special Provisions: N/A

ADR-Transport category (Tunnel restriction code): N/A

ADR Limited Quantities: N/A

ADR Excepted Quantities: N/A

Air (IATA):

IATA-Passenger Aircraft: N/A

IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Subsidiary hazards: N/A

IATA-Erg: N/A

IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage and handling: N/A

IMDG-Segregation: N/A

IMDG-Subsidiary hazards: N/A

14.7. Maritime transport in bulk according to IMO instruments

N.A.

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) n. 2020/878

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2022/692 (ATP 18 CLP)

Regulation (EU) n. 2023/707

Regulation (EU) n. 2023/1434 (ATP 19 CLP)

Regulation (EU) n. 2023/1435 (ATP 20 CLP)

Regulation (EU) n. 2024/197 (ATP 21 CLP)

Regulation (EU) n. 2024/2564 (ATP 22 CLP)

Regulation (EU) n. 2024/2865

Regulation (EU) n. 2025/1222 (ATP 23 CLP)

Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3, 78

The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

Concentration of synthetic polymer microparticles: 4.185%

Polymer identity: Polymers of propylene or of other olefins, in primary forms

Restrictions related to the substances contained: 30, 40, 70, 75

Provisions related to directive EU 2012/18 (Seveso III):

None

Explosives precursors – Regulation 2019/1148

No substances listed

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

German Water Hazard Class.

Class 3: extremely hazardous.

German Lagerklasse according to TRGS 510:

LGK 10

SVHC Substances:

No SVHC substances present in concentration $\geq 0.1\%$ **Dir. 2004/42/EC (VOC directive)**

(ready to use)

Volatile Organic compounds - VOCs = 0.41 %

Volatile Organic compounds - VOCs = 5.19 g/L

REGULATION (EU) No 528/2012

The product is identified as an article treated pursuant to art. 58 of Regulation (EU) no. 528/2012 and subsequent amendments.

Substances included in Regulation (EU) n. 528/2012 (concerning the making available on the market and use of biocidal products):

Nomenclature IUPAC: Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT)

Nomenclature BPR: C(M)IT/MIT (3:1)

CAS number: 55965-84-9

Product-type 6: Preservatives for products during storage

Assessment status: Approved

Commission Implementing Regulation (EU) 2016/131 ; Nomenclature IUPAC: 1,2-benzisothiazol-3(2H)-one
 Nomenclature BPR: BIT
 CAS number: 2634-33-5
 Product-type 6: Preservatives for products during storage
 Assessment status: Approved
 Commission Implementing Regulation (EU) 2025/929; Nomenclature IUPAC: 2-methyl-2H-isothiazol-3-one
 Nomenclature BPR: MIT
 CAS number: 2682-20-4
 Product-type 6: Preservatives for products during storage
 Assessment status: Approved.
 Commission Implementing Regulation (EU) 2025/1257; Nomenclature IUPAC: 3-iodo-2-propynyl butylcarbamate
 Nomenclature BPR: IPBC
 CAS number: 55406-53-6
 Product-type 6: Preservatives for products during storage
 Assessment status: Approved EU 1037/2013
 Commission Implementing Regulation
 Product-type 7: Film preservatives
 Assessment status: Initial application for approval in progress. Competent authority evaluation
 Product-type 8: Film preservatives
 Assessment status: Approved
 Commission Implementing Regulation EU 2015/1728

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

zinc oxide

ethanediol; ethylene glycol

SECTION 16: Other information

Code	Description	
H301	Toxic if swallowed.	
H302	Harmful if swallowed.	
H310	Fatal in contact with skin.	
H311	Toxic in contact with skin.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H330	Fatal if inhaled.	
H372	Causes damage to organs through prolonged or repeated exposure.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Code	Hazard class and hazard category	Description
3.1/2/Dermal	Acute Tox. 2	Acute toxicity (dermal), Category 2
3.1/2/Inhal	Acute Tox. 2	Acute toxicity (inhalation), Category 2
3.1/3/Dermal	Acute Tox. 3	Acute toxicity (dermal), Category 3
3.1/3/Oral	Acute Tox. 3	Acute toxicity (oral), Category 3
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1	Skin Corr. 1	Skin corrosion, Category 1
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/1C	Skin Corr. 1C	Skin corrosion, Category 1C
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2

3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
3.9/1	STOT RE 1	Specific target organ toxicity — repeated exposure, Category 1
3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3
EUH071		EUH071

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: Keep Away From Heat

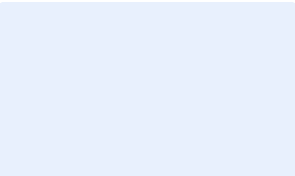
KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- Safety Data Sheet
- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 6: Accidental release measures
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 15: Regulatory information
- SECTION 16: Other information



Exposure Scenario

Ethane-1,2-diol

Exposure Scenario, 09/08/2021

Substance identity	
	Ethane-1,2-diol
CAS No.	107-21-1
INDEX No.	603-027-00-1
EINECS No.	203-473-3
Registration number	01-2119456816-28

Table of contents

1. **ES 1** Widespread use by professional workers; Various products (PC9a, PC9b)

1. ES 1

Widespread use by professional workers; Various products (PC9a, PC9b)

1.1 TITLE SECTION

Exposure Scenario name	Use in coatings - Use in rigid foams, coatings, adhesives and sealants
Date - Version	09/08/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Coatings and paints, thinners, paint removers (PC9a) - Fillers, putties, plasters, modelling clay (PC9b)

Environment Contributing Scenario

CS1	ERC8d
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Worker Contributing Scenario

CS2 Material transfers	PROC8a
CS3 Rolling, Brushing	PROC10
CS4 Roller, spreader, flow application	PROC11
CS5 Handling and dilution of concentrates	PROC19

1.2 Conditions of use affecting exposure**1.2. CS1: Environment Contributing Scenario (ERC8d)**

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d)
---	--

Product (article) characteristics**Physical form of product:**

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use (or from service life)**Amounts used:**

Daily amount per site = 5479 kg

Release type: Continuous release**Emission days:** 365 days per year***Technical and organisational conditions and measures*****Control measures to prevent releases**

Municipal sewage treatment plant is assumed.	Air - minimum efficiency of: = 95 % Water - minimum efficiency of: = 87 %
--	--

Conditions and measures related to treatment of waste (including article waste)**Waste treatment**

Contain and dispose of waste according to local regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100

Local freshwater dilution factor: 10

1.2. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration < 8 h

Frequency:

Use frequency < 240 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Provide extract ventilation to points where emissions occur. Ensure operatives are trained to minimise exposures. Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.	Inhalation - minimum efficiency of: 80 %
--	--

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable respiratory protection.

Other conditions affecting worker exposure

Indoor use

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.2. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration < 8 h

Frequency:

Use frequency < 240 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Provide extract ventilation to points where emissions occur. Ensure operatives are trained to minimise exposures. Supervision in place to check that the risk management measures in place are being used correctly and	Inhalation - minimum efficiency of: 80 %
---	--

operation conditions followed.		
Conditions and measures related to personal protection, hygiene and health evaluation		
Personal protection		
Wear suitable respiratory protection. Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training.		Dermal - minimum efficiency of: 90 %
Other conditions affecting worker exposure		
Indoor use Professional use Temperature: Assumes use at not more than 20 °C above ambient temperature. Body parts exposed: Assumes that potential dermal contact is limited to hands.		
1.2. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)		
Process Categories	Non industrial spraying (PROC11)	
Product (article) characteristics		
Physical form of product: Liquid		
Concentration of substance in product: Covers percentage substance in the product up to 1 %.		
Amount used, frequency and duration of use/exposure		
Amounts used: Application rate 0.05 L/min		
Duration: Exposure duration < 150 min		
Frequency: Use frequency < 5 days per week		
Technical and organisational conditions and measures		
Technical and organisational measures Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Ensure operatives are trained to minimise exposures. Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.		
Conditions and measures related to personal protection, hygiene and health evaluation		
Personal protection		
Wear suitable respiratory protection. Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training. Wear suitable coveralls to prevent exposure to the skin.		Dermal - minimum efficiency of: 80 % Inhalation - minimum efficiency of: 40 %
Other conditions affecting worker exposure		
Indoor use Professional use Room size: Covers use in room size of < 1000 m³ Temperature: Assumes use at not more than 20 °C above ambient temperature. Body parts exposed: Assumes that potential dermal contact is limited to hands and forearms.		
1.2. CS5: Worker Contributing Scenario: Handling and dilution of concentrates (PROC19)		
Process Categories	Manual activities involving hand contact (PROC19)	

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration < 15 min

Frequency:

Use frequency < 240 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Provide extract ventilation to points where emissions occur.

Ensure operatives are trained to minimise exposures.

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Inhalation - minimum efficiency of: 80 %

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable respiratory protection.

Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training.

Dermal - minimum efficiency of: 90 %

Other conditions affecting worker exposure

Indoor use

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.3 Exposure estimation and reference to its source

1.3. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 12.94 mg/m ³	ECETOC TRA worker v2.0	= 0.37
dermal, systemic, long-term	= 13.71 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.01

1.3. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 12.94 mg/m ³	ECETOC TRA worker v2.0	= 0.37
dermal, systemic, long-term	= 2.74 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.03

1.3. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 14.05 mg/m ³	ECETOC TRA worker v2.0	= 0.4
dermal, systemic, long-term	= 53.75 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.51

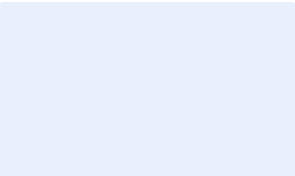
1.3. CS5: Worker Contributing Scenario: Handling and dilution of concentrates (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 6.47 mg/m ³	ECETOC TRA worker v2.0	= 0.18
dermal, systemic, long-term	= 14.14 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.13

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure Scenario

Zinc Oxide

Exposure Scenario, 04/07/2022

Substance identity	
	Zinc Oxide
CAS No.	1314-13-2
INDEX No.	030-013-00-7
EINECS No.	215-222-5
Registration number	01-2119463881-32

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1. **ES 1** Widespread use by professional workers; Various products (PC9a, PC9b)

1. ES 1		Widespread use by professional workers; Various products (PC9a, PC9b)	
1.1 TITLE SECTION			
Exposure Scenario name	Professional application of coatings and inks - Use in rigid foams, coatings, adhesives and sealants		
Date - Version	04/07/2022 - 1.0		
Life Cycle Stage	Widespread use by professional workers		
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22)		
Product Categories	Coatings and paints, thinners, paint removers (PC9a) - Fillers, putties, plasters, modelling clay (PC9b)		
Environment Contributing Scenario			
CS1	ERC8a - ERC8d		
Worker Contributing Scenario			
CS2 Rolling, Brushing	PROC10		
CS3 Rolling, Brushing	PROC10		
CS4 Roller, spreader, flow application	PROC11		
CS5 Roller, spreader, flow application	PROC11		
1.2 Conditions of use affecting exposure			
1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8d)			
Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)		
<i>Product (article) characteristics</i>			
Physical form of product: Solid, medium dustiness			
Concentration of substance in product: Covers percentage substance in the product up to 25 %.			
<i>Amount used, frequency and duration of use (or from service life)</i>			
Amounts used: Application rate 50 t(tonnes)/year			
Release type: Intermittent release			
<i>Technical and organisational conditions and measures</i>			
Control measures to prevent releases			
Upgrade of the system in place or additional air treatment measures, such as wet scrubber and/or air filtration and/or thermal oxidation and/or vapour recovery systems, in order to achieve a reduction of the air emissions.			Air - minimum efficiency of: > 50 %
<i>Conditions and measures related to sewage treatment plant</i>			
STP type: Municipal Sewage Treatment Plant			
STP effluent (m³/day): 2000			
<i>Conditions and measures related to treatment of waste (including article waste)</i>			

Waste treatment

Incineration, disposal or recycling at specific offsite provider

1.2. CS2: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)
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Product (article) characteristics**Physical form of product:**

Solid, medium dustiness

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure**Amounts used:**

Application rate 50 t(tonnes)/year

Application rate 0.15 tonnes/day

Duration:

Covers daily exposures up to 8 hours

Conditions and measures related to personal protection, hygiene and health evaluation**Personal protection**

Wear suitable gloves tested to EN374. Wear suitable face shield. Use suitable eye protection. Provide employee with skin care programmes. Wear suitable respiratory protection.	Dermal - minimum efficiency of: >= 90 %
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Other conditions affecting worker exposure

Indoor use

Professional use

Temperature: Assumes process temperature up to 25°C

1.2. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)
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Product (article) characteristics**Physical form of product:**

Solid, medium dustiness

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure**Amounts used:**

Application rate 50 t(tonnes)/year

Application rate 0.15 tonnes/day

Duration:

Covers daily exposures up to 8 hours

Conditions and measures related to personal protection, hygiene and health evaluation**Personal protection**

Wear suitable gloves tested to EN374. Wear suitable face shield. Use suitable eye protection. Provide employee with skin care programmes.	Dermal - minimum efficiency of: >= 90 %
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Wear suitable respiratory protection.		
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Other conditions affecting worker exposure

Outdoor use
Professional use
Temperature: Assumes process temperature up to 25°C

1.2. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Process Categories	Non industrial spraying (PROC11)	
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Product (article) characteristics

Physical form of product:
Solid, medium dustiness

Concentration of substance in product:
Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Amounts used:
Application rate 50 t(tonnes)/year
Application rate 0.15 tonnes/day

Duration:
Covers daily exposures up to 8 hours

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374. Wear suitable face shield. Use suitable eye protection. Provide employee with skin care programmes. Wear suitable respiratory protection.	Dermal - minimum efficiency of: >= 90 %
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Other conditions affecting worker exposure

Indoor use
Professional use
Temperature: Assumes process temperature up to 25°C

1.2. CS5: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Process Categories	Non industrial spraying (PROC11)	
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Product (article) characteristics

Physical form of product:
Solid, medium dustiness

Concentration of substance in product:
Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Amounts used:
Application rate 50 t(tonnes)/year
Application rate 0.15 tonnes/day

Duration:
Covers daily exposures up to 8 hours

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Wear suitable face shield.
Use suitable eye protection.
Provide employee with skin care programmes.
Wear suitable respiratory protection.

Dermal - minimum efficiency of: $\geq 90\%$

Other conditions affecting worker exposure

Outdoor use
Professional use

Temperature: Assumes process temperature up to 25°C

1.3 Exposure estimation and reference to its source

1.3. CS2: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic	≤ 1.4 mg/day	MEASE	N/A
dermal, systemic	≤ 0.12 mg/day	MEASE	N/A
combined routes, systemic	≤ 1.5 mg/day	MEASE	≤ 0.15

1.3. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic	≤ 6 mg/day	MEASE	N/A
dermal, systemic	≤ 0.12 mg/day	MEASE	N/A
combined routes, systemic	≤ 6 mg/day	MEASE	≤ 0.6

1.3. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic	≤ 6 mg/day	MEASE	N/A
dermal, systemic	≤ 0.12 mg/day	MEASE	N/A
combined routes, systemic	≤ 6 mg/day	MEASE	≤ 0.6

1.3. CS5: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic	≤ 24 mg/day	MEASE	N/A
dermal, systemic	≤ 0.12 mg/day	MEASE	N/A

combined routes, systemic	≤ 24 mg/day	MEASE	≤ 2.4
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1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.