Safety Data Sheet
Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878
REFRESHER
Date of first edition: 11/12/2021
Safety Data Sheet dated 20/09/2024
version 4

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

1.1. Product identifier

Mixture identification:

Trade name: REFRESHER

Trade code: S100B0124 .013

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

Recommended use: Other paints and coating materials

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 Poison information centre: 01 809 2166 (Daily 8am-10pm) In case of emergency call 999 or 112

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)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Special Provisions:

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

EUH210 Safety data sheet available on request.

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 >= 0.1%

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: REFRESHER

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

Qty	Name	Ident. Numb.	Classification	Registration Number

<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	01-2120764690-50

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

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

Wash with plenty of water.

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.

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)

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)

	OEL Type	Country	Occupational Exposure Limit
2-amino-2-methylpropanol CAS: 124-68-5	NATIONAL	DENMARK	Long Term: 3 ppm Source: At-vejledning C.0.1-1
	SUVA	SWITZERLAND	Long Term: 8.7 mg/m3 - 2.4 ppm; Short Term: 17.4 mg/m3 - 4.8 ppm R/H, SSC, Foie / Leber, 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
	NATIONAL	GERMANY	Long Term: 3.7 mg/m3 - 1 ppm DFG, H, Y, 11, 2(II) Source: TRGS 900
	NATIONAL	SLOVENIA	Long Term: 3.7 mg/m3 - 1 ppm; Short Term: 7.4 mg/m3 - 2 ppm K, Y Source: UL št. 72, 11. 5. 2021
2-diethylaminoethanol; N,N-diethylethanolamine CAS: 100-37-8	ACGIH		Long Term: 2 ppm (8h) Skin - URT irr, CNS convul
	NATIONAL	AUSTRALIA	Long Term: 48 mg/m3 - 10 ppm (8h)
	NATIONAL	AUSTRIA	Long Term: 24 mg/m3 - 5 ppm; Short Term: Ceiling - 24 mg/m3 - 5 ppm Mow, MAK, H Source: GKV, BGBl. II Nr. 156/2021
	NATIONAL	BULGARIA	Long Term: 50 mg/m3 Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL	CZECHIA	Long Term: 50 mg/m3; Short Term: Ceiling - 100 mg/m3 D, I Source: Nařízení vlády č. 361-2007 Sb
	NATIONAL	DENMARK	Long Term: 9.6 mg/m3 - 2 ppm H Source: BEK nr 2203 af 29/11/2021
	NATIONAL	FINLAND	Short Term: 49 mg/m3 - 10 ppm Source: HTP-ARVOT 2020
	NATIONAL	FRANCE	Long Term: 50 mg/m3 - 10 ppm Source: INRS outil65
	NATIONAL	GREECE	Long Term: 50 mg/m3 - 10 ppm Δ Source: ΦΕΚ 94/Α` 13.5.1999
	NATIONAL	LITHUANIA	Long Term: 10 mg/m3 - 2 ppm; Short Term: 50 mg/m3 - 10 ppm O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
	NATIONAL	NORWAY	Long Term: 50 mg/m3 - 10 ppm H Source: FOR-2021-06-28-2248

	NATIONAL	POLAND	Long Term: 13 mg/m3; Short Term: 26 mg/m3 skóra Source: Dz.U. 2018 poz. 1286
	NATIONAL	SLOVAKIA	Long Term: 24 mg/m3 - 5 ppm K Source: 355 NARIADENIE VLÁDY z 10. mája 2006
	NATIONAL	SWEDEN	Long Term: 10 mg/m3 - 2 ppm; Short Term: 50 mg/m3 - 10 ppm H, V Source: AFS 2021:3
	SUVA	SWITZERLAND	Long Term: 50 mg/m3 - 10 ppm R/H, VR SNC / AW ZNS, NIOSH OSHA Source: suva.ch/valeurs-limites
	NATIONAL	BELGIUM	Long Term: 9.7 mg/m3 - 2 ppm D Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATIONAL	CROATIA	Long Term: 50 mg/m3 - 10 ppm Source: NN 1/2021
	NATIONAL	GERMANY	Long Term: 24 mg/m3 - 5 ppm DFG, H, Y, 1(I) Source: TRGS 900
	NATIONAL	IRELAND	Long Term: 2 ppm Sk Source: 2021 Code of Practice
	NATIONAL	ROMANIA	Long Term: 30 mg/m3 - 6 ppm; Short Term: 45 mg/m3 - 9 ppm P Source: Republicarea 1 - nr. 743 din 29 iulie 2021
	NATIONAL	SLOVENIA	Long Term: 24 mg/m3 - 5 ppm; Short Term: 24 mg/m3 - 5 ppm K, Y Source: UL št. 72, 11. 5. 2021
	NATIONAL	SPAIN	Long Term: 9.7 mg/m3 - 2 ppm vía dérmica Source: LEP 2022
2-chloracetamide CAS: 79-07-2	NATIONAL	AUSTRIA	f, Sh Source: GKV, BGBl. II Nr. 156/2021
2-methylisothiazol-3(2H)-one CAS: 2682-20-4	NATIONAL	SLOVENIA	Long Term: 0.05 mg/m3 (8h)
	NATIONAL	AUSTRIA	Long Term: 0.05 mg/m3 MAK, Sh Source: GKV, BGBl. II Nr. 156/2021
Bornan-2-one CAS: 76-22-2	ACGIH		Long Term: 2 ppm (8h); Short Term: 3 ppm A4 - Eye and URT irr, anosmia
	NATIONAL	BELGIUM	Long Term: 12 mg/m3 - 2 ppm; Short Term: 19 mg/m3 - 3 ppm Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATIONAL	CROATIA	Long Term: 13 mg/m3 - 2 ppm; Short Term: 19 mg/m3 - 3 ppm Source: NN 1/2021
	NATIONAL	IRELAND	Long Term: 12 mg/m3 - 2 ppm; Short Term: 18 mg/m3 - 3 ppm Source: 2021 Code of Practice
	NATIONAL	ROMANIA	Long Term: 1 mg/m3 - 6 ppm; Short Term: 3 mg/m3 - 18 ppm Source: Republicarea 1 - nr. 743 din 29 iulie 2021
	NATIONAL	SPAIN	Long Term: 13 mg/m3 - 2 ppm; Short Term: 19 mg/m3 - 3 ppm Source: LEP 2022
	NATIONAL	AUSTRIA	Long Term: 13 mg/m3 - 2 ppm MAK Source: BGBl. II Nr. 156/2021
	NATIONAL	BULGARIA	Long Term: 12 mg/m3; Short Term: 18 mg/m3 Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL	DENMARK	Long Term: 12 mg/m3 - 2 ppm Source: BEK nr 2203 af 29/11/2021

	NATIONAL	FINLAND	Long Term: 1.9 mg/m3 - 0.3 ppm; Short Term: 5.7 mg/m3 - 0.9 ppm Source: HTP-ARVOT 2020
	NATIONAL	FRANCE	Long Term: 12 mg/m3 - 2 ppm Source: INRS outil65
	NATIONAL	GREECE	Long Term: 12 mg/m3; Short Term: 18 mg/m3 Source: ΦΕΚ 94/Α` 13.5.1999
	NATIONAL	LITHUANIA	Long Term: 3 mg/m3 Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
	NATIONAL	NORWAY	Long Term: 12 mg/m3 - 2 ppm Source: FOR-2021-06-28-2248
	NATIONAL	POLAND	Long Term: 12 mg/m3; Short Term: 18 mg/m3 Source: Dz.U. 2018 poz. 1286
	NATIONAL	SLOVAKIA	Long Term: 13 mg/m3 - 2 ppm; Short Term: 26 mg/m3 - 4 ppm Source: 355 NARIADENIE VLÁDY z 10. mája 2006
	SUVA	SWITZERLAND	Long Term: 13 mg/m3 - 2 ppm VRS Yeux / OAW Auge, NIOSH, 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
MUSK KETONE; 3,5-DINITRO-2,6-DIMETHYL-4-TERT-BUTYLACETOPHENONE; 4'-TERT-BUTYL-2',6'-DIMETHYL-3',5'-DINITROACETOPHENONE CAS: 81-14-1	NATIONAL	AUSTRIA	III B Source: BGBl. II Nr. 156/2021
DIPHENYL ETHER CAS: 101-84-8	ACGIH		Long Term: 1 ppm (8h); Short Term: 2 ppm V - URT and eye irr, nausea
	EU		Long Term: 7 mg/m3 - 1 ppm (8h); Short Term: 14 mg/m3 - 2 ppm
	NATIONAL	BELGIUM	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATIONAL	CROATIA	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: 2017/164/EU
	NATIONAL	CYPRUS	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
	NATIONAL	GERMANY	Long Term: 7.1 mg/m3 - 1 ppm DFG, Y, 11, 1(I) Source: TRGS 900
	NATIONAL	GREECE	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: Π.Δ. 82/2018 (ΦΕΚ 152/Α` 21.8.2018)
	NATIONAL	IRELAND	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm IOELV Source: 2021 Code of Practice
	NATIONAL	ITALY	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: D.lgs. 81/2008, Allegato XXXVIII
	NATIONAL	LATVIA	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: KN325P1
	NATIONAL	LUXEMBOURG	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: Mémorial A n.226 du 22 mars 2021
	NATIONAL	MALTA	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: S.L.424.24
	NATIONAL	PORTUGAL	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: Decreto-Lei n.º 1/2021
	NATIONAL	ROMANIA	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Dir. 2017/164 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
	NATIONAL	SLOVENIA	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm

			Y, EU4 Source: UL št. 72, 11. 5. 2021
	NATIONAL	SPAIN	Long Term: 7.1 mg/m3 - 1 ppm; Short Term: 14.2 mg/m3 - 2 ppm VLI Source: LEP 2022
	NATIONAL	AUSTRIA	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm 15(Miw), 4x, MAK Source: GKV, BGBl. II Nr. 156/2021
	NATIONAL	BULGARIA	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL	CZECHIA	Long Term: 5 mg/m3; Short Term: Ceiling - 10 mg/m3 Source: Nařízení vlády č. 361-2007 Sb
	NATIONAL	DENMARK	Long Term: 7 mg/m3 - 1 ppm E Source: BEK nr 2203 af 29/11/2021
	NATIONAL	ESTONIA	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATIONAL	FINLAND	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: HTP-ARVOT 2020
	NATIONAL	FRANCE	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: INRS outil65, arrêté du 30-06-2004 modifié
	NATIONAL	HUNGARY	Long Term: 7 mg/m3; Short Term: 14 mg/m3 EU4, N Source: 5/2020. (II. 6.) ITM rendelet
	NATIONAL	NETHERLANDS	Long Term: 7 mg/m3; Short Term: 14 mg/m3 Source: Arbeidsomstandighedenregeling - Lijst A
	NATIONAL	NORWAY	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm E S Source: FOR-2021-06-28-2248
	NATIONAL	POLAND	Long Term: 7 mg/m3; Short Term: 14 mg/m3 Source: Dz.U. 2018 poz. 1286
	NATIONAL	SLOVAKIA	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: 355 NARIADENIE VLÁDY z 10. mája 2006
	NATIONAL	SWEDEN	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: AFS 2021:3
	SUVA	SWITZERLAND	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm R2D, R2F, SSC, VRS Yeux / OAW Auge, NIOSH, 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
	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 7 mg/m3 - 1 ppm; Short Term: 14 mg/m3 - 2 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
(R)-p-mentha-1,8-diene CAS: 5989-27-5	NATIONAL	FINLAND	Long Term: 140 mg/m3 - 25 ppm; Short Term: 280 mg/m3 - 50 ppm Source: HTP-ARVOT 2020
	NATIONAL	NORWAY	Long Term: 140 mg/m3 - 25 ppm A Source: FOR-2021-06-28-2248
	SUVA	SWITZERLAND	Long Term: 40 mg/m3 - 7 ppm; Short Term: 80 mg/m3 - 14 ppm S, SSC, Foie / Leber Source: suva.ch/valeurs-limites
	NATIONAL	GERMANY	Long Term: 28 mg/m3 - 5 ppm DFG, H, Sh, Y, 4(II) Source: TRGS 900
	NATIONAL	SLOVENIA	Long Term: 28 mg/m3 - 5 ppm; Short Term: 112 mg/m3 - 20 ppm K, Y

			Source: UL št. 72, 11. 5. 2021
	NATIONAL	SPAIN	Long Term: 168 mg/m3 - 30 ppm Sen, vía dérmica Source: LEP 2022
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9	NATIONAL	GERMANY	Long Term: 0.2 mg/m3; Short Term: 0.4 mg/m3 DFG; Long term and short term: inhalable fraction Source: TRGS900
	NATIONAL	AUSTRIA	Long Term: 0.05 mg/m3 MAK, Sh Source: GKV, BGBl. II Nr. 156/2021
	SUVA	SWITZERLAND	Long Term: 0.2 mg/m3; Short Term: 0.4 mg/m3 TWA mg/m3: (i), S, SSC, VRS Peau Yeux / OAW Haut Auge Source: suva.ch/valeurs-limites

Predicted No Effect Concentration (PNEC) values

2-methylisothiazol-3(2H)-one CAS: 2682-20-4	Exposure Route: Fresh Water; PNEC Limit: 3.39 µg/l
	Exposure Route: Intermittent releases (fresh water); PNEC Limit: 3.39 µg/l
	Exposure Route: Marine water; PNEC Limit: 3.39 µg/l
	Exposure Route: Intermittent releases (marine water); PNEC Limit: 3.39 µg/l
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 230 µg/l
	Exposure Route: Soil; PNEC Limit: 47.1 µg/kg

Derived No Effect Level (DNEL) values

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:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

N.A.

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: White

Odour: Characteristic

Odour threshold: N.A.

pH: =9.20

Kinematic viscosity: <= 20,5 mm2/sec (40 °C)

Melting point/freezing point: N.A.
Boiling point or initial boiling point and boiling range: > 100 °C (212 °F)
Flash point: > 100°C / 212°F
Lower and upper explosion limit: N.A.
Relative vapour density: N.A.
Vapour pressure: 23.00
Density and/or relative density: 1.00 g/cm3
Solubility in water: Miscible
Solubility in oil: N.A.
Partition coefficient n-octanol/water (log value): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Flammability: N.A.
Volatile Organic compounds - VOCs = 0.98 % ; 9.80 g/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:

2-methylisothiazol-3(2H)-one	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	Oral route
		Carcinogenicity Oral Rat Negative	
	g) reproductive toxicity	Reproductive Toxicity Oral Rat = 200 Ppm	NOAEL

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 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:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
2-methylisothiazol-3(2H)-one	CAS: 2682-20-4 - EINECS: 220-239-6 - INDEX: 613-326-00-9	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 4.77 mg/L 96h ,,OECD Guideline 203 (Fish, Acute Toxicity Test)
		b) Aquatic chronic toxicity : NOEC Fish Oncorhynchus mykiss = 4.93 mg/L Dossier ECHA
		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 0.934 mg/L 48h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
		b) Aquatic chronic toxicity : EC10 Daphnia Daphnia magna = 0.044 mg/L OECD Guideline 211 (Daphnia magna Reproduction Test) - Duration 21d
		a) Aquatic acute toxicity : EC50 Algae Selenastrum capricornutum = 0.103 mg/L 72h Dossier ECHA
		a) Aquatic acute toxicity : EC50 Sludge activated sludge of a predominantly domestic sewage = 41 mg/L 3h ,,OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test
		b) Aquatic chronic toxicity : EC50 freshwater sediment = 50 mg/kg Duration 28d Draft OECD Guideline (now OECD Guideline 225) - 28days

12.2. Persistence and degradability

Component	Persitence/Degradability:	Test	Notes:
2-methylisothiazol-3(2H)-one	Non-readily biodegradable	CO2 production	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

12.3. Bioaccumulative potential

Component	Bioaccumulation	Test	Value	Notes:
2-methylisothiazol-3(2H)-one	Bioaccumulative	BCF - Bioconcentrantion factor	5.750	carcass
	Bioaccumulative	BCF - Bioconcentrantion factor	48.100	viscera

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT or vPvB substances present in concentration >= 0.1%

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 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. Disposal through discharge into wastewater is not permitted

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.

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

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-Technical name: N/A

IMDG-Technical 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 Code: N/A

IMDG-Stowage Note: N/A

IMDG-Subsidiary hazards: N/A

IMDG-Special Provisions: 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 (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. 2020/878

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: None.

Restrictions related to the substances contained: 40, 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.

2: Hazard to waters

German Lagerklasse according to TRGS 510:

LGK 10

SVHC Substances:

No SVHC substances present in concentration >= 0.1%

15.2. Chemical safety assessment

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

SECTION 16: Other information

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:

- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- 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 13: Disposal considerations
- SECTION 14: Transport information
- SECTION 15: Regulatory information