Safety Data Sheet
Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878
KERAKOVER ACTIV
Date of first edition: 10/31/2022
Safety Data Sheet dated 11/25/2022
version 8

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

1.1. Product identifier

Mixture identification:

Trade name: KERAKOVER ACTIV

Trade code: FS230 .011X

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

Recommended use: Coating compound

Uses advised against: Data not available.

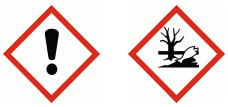
1.3. Details of the supplier of the safety data sheet

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
Kerakoll Italy - +39-0536-816511
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)

Skin Sens. 1A	May cause an allergic skin reaction.
Aquatic Chronic 2	Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:
No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Pictograms and Signal Words


Warning

Hazard statements

H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe vapours.
P280	Wear protective gloves and eye protection.
P302+P352	IF ON SKIN: Wash with plenty of water.

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

Contains

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

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: KERAKOVER ACTIV

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

Qty	Name	Ident. Numb.	Classification	Registration Number
1-2,4 %	2,2' -oxybisethanol; diethylene glycol	CAS:111-46-6 EC:203-872-2 Index:603-140-00-6	Acute Tox. 4, H302	01-2119457857-21
< 0,3 %	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	CAS:68424-85-1 EC:270-325-2	Acute Tox. 4, H302; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:1, M-Acute:10	
< 0,1 %	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 ≥ 0.0015%: Skin Sens. 1A H317 Acute Toxicity Estimate: ATE - Oral: 125mg/kg bw ATE - Dermal: 311mg/kg bw	
< 0,05 %	Sulphuric acid	CAS:7664-93-9 EC:231-639-5 Index:016-020-00-8	Skin Corr. 1A, H314 Specific Concentration Limits: C ≥ 15%: Skin Corr. 1A H314 5% ≤ C < 15%: Skin Irrit. 2 H315 5% ≤ C < 15%: Eye Irrit. 2 H319	01-2119458838-20

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Remove contaminated clothing immediatley and dispose off safely.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

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, inhaltion 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.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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)

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
2-octyl-2H-isothiazol-3-one	NATIONAL	AUSTRIA		0.050		0.050		Long term and short term: inhalable aerosol
	NATIONAL	GERMANY		0.050		0.100		AGS; Long term and short term: inhalable aerosol

	NATIONAL	GERMANY	0.050	0.100	DFG: Long term and short term: inhalable aerosol
	NATIONAL	SWITZERLAND	0.050	0.100	Long term and short term: inhalable aerosol
	NATIONAL	SLOVENIA	0.050	0.100	Long term and short term: inhalable fraction
Sulphuric acid	EU	NNN	0.05		Thoracic fraction
	NATIONAL	AUSTRIA	0.100	0.200	Long term and short term: inhalable aerosol
	NATIONAL	BELGIUM	1.000	3.000	
	NATIONAL	CANADA	0.200		Ontario
	NATIONAL	CANADA	1.000	3.000	Quebec
	NATIONAL	DENMARK	1.000	2.000	
	NATIONAL	FRANCE	0.050	3.000	Long term: thoracic fraction
	NATIONAL	GERMANY	0.100	0.100	AGS; Long term and short term: inhalable aerosol
	NATIONAL	GERMANY	0.100	0.100	DFG; Long term and short term: inhalable aerosol
	NATIONAL	HUNGARY	1.000	1.000	
	NATIONAL	IRELAND	0.050		
	NATIONAL	ISRAEL	0.300		
	NATIONAL	ITALY	0.050		Thoracic fraction
	NATIONAL	JAPAN	1.000		JSOH
	NATIONAL	LATVIA	0.050		
	NATIONAL	NEW ZEALAND	0.100		
	NATIONAL	CHINA	1.000	2.000	
	NATIONAL	POLAND	1.000	3.000	
	NATIONAL	ROMANIA	0.050		
	NATIONAL	SINGAPORE	1.000	3.000	
	NATIONAL	KOREA, REPUBLIC OF	0.200	0.600	
	NATIONAL	SPAIN	0.050		
	NATIONAL	SWEDEN	0.100	0.200	Long term and short term: inhalable fraction
	NATIONAL	SWITZERLAND	0.100	0.200	Long term and short term: inhalable fraction
	NATIONAL	NETHERLANDS	0.050		Thoracic aerosol
	NATIONAL	TURKEY	0.050		
	NATIONAL	UNITED STATES OF AMERICA	1.000		NIOSH
	NATIONAL	UNITED STATES OF AMERICA	1.000		OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	1.000		OSHA
	NATIONAL	ARGENTINA	1.000	3.000	
	NATIONAL	BULGARIA	0.050		

	NATIONAL	CZECHIA	1.000	2.000	
	NATIONAL	CHILE	0.880	3.000	
	NATIONAL	CROATIA	0.050		
	NATIONAL	ESTONIA	0.050		
	NATIONAL	ICELAND	0.050		
	NATIONAL	LITHUANIA	0.050	3.000	
	NATIONAL	MALAYSIA	1.000		
	NATIONAL	MEXICO	0.200		
	NATIONAL	PORTUGAL	0.200		
	NATIONAL	RUSSIAN FEDERATIO N		1.000	
	NATIONAL	SLOVAKIA	0.050		
	NATIONAL	SLOVENIA	0.050	0.050	
	NATIONAL	SOUTH AFRICA	1.000	3.000	
	NATIONAL	TAIWAN, PROVINCE OF CHINA	1.000		
	ACGIH	NNN	0.2		(T), A2(M) - Pulm func
	EU	NNN	0.05		
triisobutyl phosphate	NATIONAL	GERMANY	50.000	100.000	

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
2-octyl-2H-isothiazol-3-one	26530-20-1	2.200 µg/l	Freshwater	
		1.220 µg/l	Intermittent releases (freshwater)	
		220.000 ng/L	Marine water	
		122.000 ng/L	Intermittent releases (marine water)	
		47.500 µg/kg	Freshwater sediments	
		47.500 µg/kg	Marine water sediments	
		8.200 µg/kg	Soil	
Sulphuric acid	7664-93-9	2.500 µg/l	Freshwater	
		250.000 ng/L	Marine water	
		8.800 mg/l	Microorganisms in sewage treatments	
		2.000 µg/kg	Freshwater sediments	
		2.000 µg/kg	Marine water sediments	

Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency
Sulphuric acid	7664-93-9		50.000 µg/m³		Human Inhalation	Long Term, local effects
			100.000 µg/m³		Human Inhalation	Short Term, local effects

8.2. Exposure controls

Eye protection:

Eye glasses.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Nitrile rubber .

Respiratory protection:

Use adequate protective respiratory equipment.

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

Color: Light red

Odour: Light

Odour threshold: N.A.

pH: Not Relevant (OECD 122)

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: > 100°C / 212°F

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: 23.00 hPa @ 20°C

Relative density: 1.10 g/cm3 (ISO 2811)

Solubility in water: Soluble

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Flammability: N.A.

Volatile Organic compounds - VOCs = 1.1 % ; 18.7 g/l

Particle characteristics:

Particle size: N.A.

9.2. Other information

Miscibility: N.A.

Conductivity: N.A.

Evaporation rate: N.A. 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	The product is classified: Skin Sens. 1A(H317)
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:

2,2' -oxybisethanol; diethylene glycol	a) acute toxicity	LD50 Oral Rat = 16500.00 mg/kg	
		LC50 Inhalation of aerosol Rat > 4.60 mg/l 4h	
		LD50 Skin Rabbit = 13300.00 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Human Negative 24h	
	c) serious eye damage/irritation	Eye Irritant Rabbit No 24h	
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative	
	f) carcinogenicity	Genotoxicity Negative	Mouse intraperitoneal rout
	g) reproductive toxicity	No Observed Adverse Effect Level Oral = 3060.00 mg/kg	Mouse
2-octyl-2H-isothiazol-3-one	a) acute toxicity	ATE - Oral : 125 mg/kg bw	
		ATE - Dermal : 311 mg/kg bw	
		LD50 Oral Rat = 125.00 mg/kg	
		LC50 Inhalation Mist Rat = 0.27 mg/l 4h	
		LD50 Skin Rabbit = 311.00000 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	
Sulphuric acid	a) acute toxicity	LD50 Oral Rat = 2140.00 mg/kg	
		LC50 Inhalation of aerosol Rat = 375.00 mg/m3	

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:

Toxic to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 2(H411)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
2,2' -oxybisethanol; diethylene glycol	CAS: 111-46-6 - EINECS: 203-872-2 - INDEX: 603-140-00-6	a) Aquatic acute toxicity : LC50 Fish = 75200.00 mg/L 96h
		b) Aquatic chronic toxicity : NOEC Fish Pimephales promelas = 15380.00 mg/L EPA guideline 600/4-89/001 - 7days
		a) Aquatic acute toxicity : EC50 invertebrates > 10000.00 mg/L 48h
		a) Aquatic acute toxicity : NOEC Algae Scenedesmus quadricauda = 100.00 mg/L
		d) Terrestrial toxicity : LC50 Worm Eisenia andrei = 10974.00 mg/kg - 63days
2-octyl-2H-isothiazol-3-one	CAS: 26530-20-1 - EINECS: 247-761-7 - INDEX: 613-112-00-5	a) Aquatic acute toxicity : LC50 Fish freshwater fish = 0.12200 mg/L dossier ECHA
		b) Aquatic chronic toxicity : EC10 Fish = 0.02200 mg/L dossier ECHA
		a) Aquatic acute toxicity : EC50 freshwater invertebrates = 0.18100 mg/L dossier ECHA
		b) Aquatic chronic toxicity : EC10 freshwater invertebrates = 0.03500 mg/L dossier ECHA
		LC50 Algae freshwater algae = 0.15000 mg/L
Sulphuric acid	CAS: 7664-93-9 - EINECS: 231-639-5 - INDEX: 016-020-00-8	a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 16.00 mg/L 96h
		b) Aquatic chronic toxicity : NOEC Fish Jordanella floridae = 0.02 mg/L
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 100.00 mg/L 48h
		b) Aquatic chronic toxicity : NOEC Tanytarsus dissimilis = 0.15 mg/L
		a) Aquatic acute toxicity : NOEC Algae Desmodesmus subspicatus = 100.00 mg/L 72h
		c) Bacteria toxicity : NOEC Sludge = 26000.00 mg/L

12.2. Persistence and degradability

Component	Persitence/Degradability:	Test	Value	Notes
2,2' -oxybisethanol; diethylene glycol	Readily biodegradable	CO2 production	92.000	28days
2-octyl-2H-isothiazol-3-one	Non-readily biodegradable			

12.3. Bioaccumulative potential

Component	Bioaccumulation	Test	Value	Notes
2,2' -oxybisethanol; diethylene glycol	Bioaccumulative	BCF - Bioconcentrantion factor	100.000	3day
2-octyl-2H-isothiazol-3-one	Bioaccumulative	BCF - Bioconcentrantion factor	19.210	L/kg ww

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

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.

A waste code according to European waste catalogue (EWC) 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):

HP 13: Sensitising; HP 14: Ecotoxic

SECTION 14: Transport information

14.1. UN number or ID number

3082

14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-octyl-2H-isothiazol-3-one - Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)

IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-octyl-2H-isothiazol-3-one - Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)

IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-octyl-2H-isothiazol-3-one - Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)

14.3. Transport hazard class(es)

ADR-Class: 9

IATA-Class: 9

IMDG-Class: 9

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Toxic Component most present: 2-octyl-2H-isothiazol-3-one

Marine pollutant: Yes

Environmental Pollutant: Yes

IMDG-EMS: F-A, S-F

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR-Label: 9

ADR - Hazard identification number: 90

ADR-Special Provisions: 274 335 375 601

ADR-Transport category (Tunnel restriction code): 3 (-)

ADR Limited Quantities: 5 L

ADR Excepted Quantities: E1

Air (IATA) :

IATA-Passenger Aircraft: 964

IATA-Cargo Aircraft: 964

IATA-Label: 9

IATA-Subsidiary hazards: -

IATA-Erg: 9L

IATA-Special Provisioning: A97 A158 A197 A215

Sea (IMDG) :

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 274 335 969

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. 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: 3

Restrictions related to the substances contained: 28, 75

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

Seveso III category according to Annex 1, part 1	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
Product belongs to category: E2	200	500

Regulation (EU) 649/2012 (PIC regulation):

No Substance Listed

German Water Hazard Class.

Class 1: slightly hazardous for water.

SVHC Substances:

No data available

REGULATION (EU) No 528/2012

Nomenclature IUPAC: N-benzyl-N,N-dimethyltetradecan-1-aminium chloride
Nomenclature BPR: ADBAC/BKC(C12-16)
CAS number: 68424-85-1
Product-type 10: Construction material preservatives
Assessment status: Initial application for approval in progress.
; Nomenclature IUPAC: octhilinone (ISO); 2-octyl-2H-isothiazol-3-one
Nomenclature BPR: OIT
CAS number: 26530-20-1
Product-type 6: Preservatives for products during storage
Assessment status: Initial application for approval in progress.
Product-type 7: Film preservatives
Assessment status: Initial application for approval in progress.
Product-type 8: Film preservatives
Assessment status: Approved
Commission Implementing Regulation EU 2017/1277
Product-type 10: Construction material preservatives
Assessment status: Initial application for approval in progress.

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
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
3.2/1A	Skin Corr. 1A	Skin corrosion, Category 1A
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
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/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
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
3.4.2/1A	Calculation method
4.1/C2	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:

- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 15. REGULATORY INFORMATION

Exposure Scenario

2,2'-oxydiethanol; diethylene glicol

Exposure Scenario, 07/07/2021

Substance identity	
	2,2'-oxydiethanol; diethylene glicol
CAS No.	111-46-6
INDEX No.	603-140-00-6
EINECS No.	203-872-2
Registration number	01-2119457857-21

Table of contents

1. ES 1 Widespread use by professional workers; Various products (PC9a, PC1)

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks - Use in rigid foams, coatings, adhesives and sealants
Date - Version	07/07/2021 - 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) - Adhesives, sealants (PC1)

Environment Contributing Scenario

CS1	ERC8a - ERC8d - ERC8c - ERC8f

Worker Contributing Scenario

CS2 Material transfers	PROC8a
CS3 Rolling, Brushing	PROC10
CS4 Roller, spreader, flow application	PROC11

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8d, ERC8c, ERC8f)

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) - Widespread use leading to inclusion into/onto article (indoor) - Widespread use leading to inclusion into/onto article (outdoor) (ERC8a, ERC8d, ERC8c, ERC8f)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 0.8 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

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

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

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 0.8 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to = 480 min

Frequency:

Use frequency = 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

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

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

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 0.8 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to = 480 min

Frequency:

Use frequency = 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

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

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

Vapour pressure:

= 0.8 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to = 480 min

Frequency:

Use frequency = 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

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 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.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8a, ERC8d, ERC8c, ERC8f)

Additional information on exposure estimation:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 13.7143 mg/kg bw/day	ECETOC TRA worker v3	= 0.318937
inhalative, systemic, long-term	= 22.1084 mg/m³	ECETOC TRA worker v3	= 0.502464

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 2.7429 mg/kg bw/day	ECETOC TRA worker v3	= 0.063787
inhalative, systemic, long-term	= 22.1084 mg/m³	ECETOC TRA worker v3	= 0.502464

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)
dermal, systemic, long-term	= 13 mg/kg bw/day	ECETOC TRA worker v3	= 0.302326
inhalative, systemic, long-term	= 6.3 mg/m³	ECETOC TRA worker v3	= 0.143182

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.