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

1.1 Product identifier

Chemical name/ trade name:	**COOL TOP FR 45**
UFI:	NC7A-Y0W5-W47P-295R
Producer:	**OMA CZ, a.s.**
Address:	**Stráž pod Ralskem, 47127, Borová 103**

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

Intended use:	Metalworking fluid
Uses advised against:	The use should be limited to those listed above.

1.3 Details of the supplier of the safety data sheet

Supplier of SDS:	OMA CZ, a.s.
Address:	Stráž pod Ralskem, 47127, Borová 103
Identification No.:	25406761
Tel:	+420 487 851 016
www:	www.omacz.cz
Responsible person for this SDS:	OMA CZ, a.s., laborator@omacz.cz

1.4 Emergency telephone number

National Poisons Information Service (NPIS), Royal Infirmary of Edinburgh, Edinburgh EH16 4SA, United Kingdom, Tel.: +44 121 507 4123, 844 892 0111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to the EC Regulation No. 1272/2008 (CLP):

Aquatic Chronic 3; Chronic (long term) aquatic hazard, category 3, H412 Harmful to aquatic life with long lasting effects.

Skin Irrit. 2; Skin corrosion/irritation, category 2, H315 Causes skin irritation.

Eye Irrit. 2; Serious eye damage/eye irritation, category 2A, H319 Causes serious eye irritation.

2.2 Label elements

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

Hazard pictogram(s):

Signal word(s):	WARNING
UFI:	NC7A-Y0W5-W47P-295R
Contain:	-
Hazard statement(s):	H315 Causes skin irritation. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statement(s):	P264 Wash … thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/…

P332/313 If skin irritation occurs: Get medical advice/attention.
P337/313 If eye irritation persists: Get medical advice/ attention.
P501 Dispose of contents / container as hazardous waste.

Supplemental information: EUH208 Contains 3-iodo-2-propynyl butylcarbamate. May produce an allergic reaction.

2.3 Other hazards

This product does not contain any substances which are classified as PBT or vPvB in a concentration of 0.1% by weight or higher.
This product does not contain SVHC in a concentration of 0.1% by weight or higher.
This product does not contain endocrine disruptors in a concentration of 0.1% by weight or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Name of the component	Content (weight %)	CAS EINECS Index N° Reg. Number	Classification according to Regulation (EC) No. 1272/2008 (CLP)	
2-(2-butoxyethoxy)ethanol *	≥ 1 - < 5	112-34-5 203-961-6 603-096-00-8 01-2119475104-44-XXXX	Eye Irrit. 2	H319
1-aminopropan-2-ol	≥ 1 - < 3	78-96-6 201-162-7 603-082-00-1 01-2119475331-43-XXXX	Acute Tox. 4 Eye Dam. 1 Skin Corr. 1B	H312 H318 H314
Dicyclohexylamine	< 2	101-83-7 202-980-7 612-066-00-3	Acute Tox. 3 Acute Tox. 3 Aquatic Acute 1 Aquatic Chronic 1 Eye Dam. 1 Skin Corr. 1B	H301 H311 H400 H410 H318 H314
3-iodo-2-propynyl butylcarbamate	≥ 0,1 - < 0,25	55406-53-6 259-627-5 616-212-00-7 01-2120762115-60-XXXX	Acute Tox. 3 Acute Tox. 4 Aquatic Acute 1 *M-factor: 10* Aquatic Chronic 1 *M-factor: 1* Eye Dam. 1 STOT RE 1 Skin Sens. 1	H331 H302 H400 H410 H318 H372 H317

Highly refined mineral oil containing < 3 % (by weight) DMSO extract according to IP346.
** Substance with a Community workplace exposure limit.*
For full text of H-statements see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

4.1.1 General advice:

In any case, avoid chaotic behavior. If you need medical treatment, always take the original package with the label or the safety data sheet. In life-threatening conditions, first resuscitate the affected person and arrange for medical assistance. Breathing - Immediately perform artificial respiration. Heart arrest - Immediately perform an indirect heart massage. Unconscious - place the affected person in a stabilized position on the side. It is always necessary to assess the situation with regard to the patient's own safety and safety. Only enter the infested area if we have adequate protection (insulating respirator, mask with the appropriate filter, protection by another worker, etc.) ATTENTION! Whenever it is a poorly ventilated area, it is important to consider the possibility that the room is infested! When handling contaminated clothing or other items, protect it with adequate personal protective equipment, including gloves. First aid should not be carried out at the place where the accident occurred, if there is a risk of the rescuer being contaminated.

4.1.2 Inhalation:

Break Exposure. Remove victim to fresh air, keep calm and warm.

4.1.3 Skin contact:

Remove contaminated clothing and footwear. Wash the affected skin with water and soap. If there is irritation, seek medical attention.

4.1.4 Eye contact:

If the contact lenses are used, carefully remove them and start rinsing with clean water, the affected eye wide open, from the inner corner to the outside and also under the lid for at least 15 minutes. If problems persist, seek medical attention.

4.1.5 Ingestion:

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person or if it has cramps.

4.1.6 Protection of first aiders:

When providing first aid, it is essential to ensure both the rescue and the rescued safety.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Basic assistance, decontamination, symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:	Foam, extinguishing powder, CO2, water mist.
Unsuitable extinguishing media:	Direct water flow - could cause fire to spread.

5.2 Special hazards arising from the substance or mixture

In the event of a fire, the following may arise: Carbon dioxide (CO2), Carbon monoxide, Nitrogen oxides (NOx), smoke, fumes, products of incomplete combustion, carbon oxides.

5.3 Advice for firefighters

Do not inhale fumes from explosions and combustion. Remove undamaged containers from the hazardous area if it is safe to do so. Use a stream of water to protect persons and cool containers in the hazardous area. Collect contaminated water separately. Do not discharge to sewers or water sources. Use self-contained breathing apparatus and chemical protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing, replace contaminated clothing. Avoid contact with skin and eyes, contamination of clothes and shoes. Ensure ventilation of the affected area. All persons who do not participate in rescue operations to a safe distance.

6.2 Environmental precautions

Prevent leakage into the environment, avoid ingress into surface water and sewers, soil and land. In case of leakage into the sewage system or water course, inform immediately its administrator, the police, the fire brigade or the environmental department.

6.3 Methods and material for containment and cleaning up

For disposal: uncover the sewer. If safe to do so, stop the seepage and remove the leaking material. Prevent widespread spread (e.g. by fencing or using bore walls).

For cleaning: Wipe with absorbent material (e.g. cloth, non-woven fabric). Capture with liquid absorbent material (sand, diatomaceous earth, acid sorbent, universal sorbent). Capture mechanically and dispose of in suitable containers. Ventilate the affected area. Thoroughly clean soiled items and floor according to environmental regulations.

6.4 Reference to other sections

See section 7, 8 a 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Use appropriate PPE. Use only in well-ventilated areas with fresh air intake or with adequate ventilation. Do not eat, drink, smoke. After working, wash your hands. Comply with regulations on health and safety at work.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed original containers in a dry, cool and well-ventilated place. Do not store with food, drink or feed. Do not store with food and feed. Keep away from oxidising agents. Recommended storage temperature 5 - 40 °C. Store away from heat, sparks, open flame.

7.3 Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.1.1 Exposure limits: According to national legislation of target country.

Substance	CAS	Permissible exposure limits (mg/m³)	Maximum permissible concentration (mg/m³)	Note
2-(2-butoxyethoxy)ethanol	112-34-5	67.5	101.2	
Mineral oils	-	5	10	

Substances with Community Exposure Limits:

Substance	CAS	Limit values (mg/m³)		Note
		OEL	STEL	
2-(2-Butoxyethoxy)ethanol	112-34-5	67.5	101.2	

8.1.2 DNEL

2-(2-butoxyethoxy)ethanol (CAS: 112-34-5)

Exposed group and route of exposure	Duration of exposure	Type of effect	Unit	Value
Workers				
Inhalation	Long-term (chronic)	systemic	mg/m³	-
		local	mg/m³	67.5
Consumers				
Oral	Long-term (chronic)	systemic	mg/kg bw/d	6.25

1-aminopropan-2-ol (CAS: 78-96-6)

Exposed group and route of exposure	Duration of exposure	Type of effect	Unit	Value
Inhalation	Long-term (chronic)	systemic	mg/m³	3.6
Consumers				
Inhalation	Long-term (chronic)	systemic	mg/m³	0.88
Dermal	Long-term (chronic)	systemic	mg/kg bw/d	0.51
Oral	Long-term (chronic)	systemic	mg/kg bw/d	0.28

Dicyclohexylamine (CAS: 101-83-7)

Exposed group and route of exposure	Duration of exposure	Type of effect	Unit	Value
Workers				
Inhalation	Long-term (chronic)	systemic	mg/m³	0.353
Dermal	Long-term (chronic)	systemic	mg/kg bw/d	0.1
Consumers				

3-iodo-2-propynyl butylcarbamate (CAS: 55406-53-6)

Exposed group and route of exposure	Duration of exposure	Type of effect	Unit	Value
Workers				
Inhalation	Long-term (chronic)	systemic	mg/m³	0.023
		local	mg/m³	1.16
Dermal	Long-term (chronic)	systemic	mg/kg bw/d	2
Consumers				

PNEC

2-(2-butoxyethoxy)ethanol (CAS: 112-34-5)

Component of the environment		PNEC	Unit	Value
Water environment	Freshwater	$PNEC_{water, fresh.}$	mg/L	1.1
	Freshwater, occasional leakage	$PNEC_{water, fresh.}$	mg/L	11
	Freshwater sediment	$PNEC_{sed., fresh.}$	mg/kg sediment dw	4.4
	Seawater	$PNEC_{water, mar.}$	mg/L	0.11
	Marine sediment	$PNEC_{sed., mar.}$	mg/kg sediment dw	0.44
Terrestrial environment / organisms	Soil	$PNEC_{soil}$	mg/kg soil dw	0.32
Food chain	Predators	$PNEC_{oral.}$	mg/kg food	56

1-aminopropan-2-ol (CAS: 78-96-6)

Component of the environment		PNEC	Unit	Value
Water environment	Freshwater	$PNEC_{water, fresh.}$	mg/L	0.032
	Freshwater, occasional leakage	$PNEC_{water, fresh.}$	mg/L	0.323
	Freshwater sediment	$PNEC_{sed., fresh.}$	mg/kg sediment dw	0.226
	Seawater	$PNEC_{water, mar.}$	mg/L	0.003
	Marine sediment	$PNEC_{sed., mar.}$	mg/kg sediment dw	0.023
Microbiological activity	Wastewater treatment plant	$PNEC_{sew. treat.}$	mg/L	3.3
Terrestrial environment / organisms	Soil	$PNEC_{soil}$	mg/kg soil dw	0.026

Dicyclohexylamine (CAS: 101-83-7)

Component of the environment		PNEC	Unit	Value
Water environment	Freshwater	$PNEC_{water, fresh.}$	mg/L	0.002
	Freshwater, occasional leakage	$PNEC_{water, fresh.}$	mg/L	0.01
	Freshwater sediment	$PNEC_{sed., fresh.}$	mg/kg sediment dw	0.075
	Seawater	$PNEC_{water, mar.}$	mg/L	0
	Marine sediment	$PNEC_{sed., mar.}$	mg/kg sediment dw	0.007

Microbiological activity	Wastewater treatment plant	PNEC $_{sew. treat.}$	mg/L	21
Terrestrial environment / organisms	Soil	PNEC $_{soil}$	mg/kg soil dw	0.014

3-iodo-2-propynyl butylcarbamate (CAS: 55406-53-6)

Component of the environment		**PNEC**	**Unit**	**Value**
Water environment	Freshwater	PNEC $_{water, fresh.}$	mg/L	0.001
	Freshwater, occasional leakage	PNEC $_{water, fresh.}$	mg/L	0.001
	Freshwater sediment	PNEC $_{sed., fresh.}$	mg/kg sediment dw	0.017
	Seawater	PNEC $_{water, mar.}$	mg/L	0
	Marine sediment	PNEC $_{sed., mar.}$	mg/kg sediment dw	0.002
Microbiological activity	Wastewater treatment plant	PNEC $_{sew. treat.}$	mg/L	0.44
Terrestrial environment / organisms	Soil	PNEC $_{soil}$	mg/kg soil dw	0.005

8.1.3 Biological limit values

Substance	**CAS No:**	**Indicator**	**Limit Value**
No data available.			

8.2 Exposure controls

8.2.1 Technical measures

Technical measures and appropriate work procedures take precedence over personal protective equipment. Observe the usual hygiene principles. Do not eat, drink, smoke. Before breaks and after work wash your hands with warm water and soap.

8.2.2 Individual protection measures

Respiratory protection:

If the exposure limits are exceeded, when using dust, fog, aerosol, use a suitable filter (type ABEK -EN 14387 - anti-gas and combined filters, type P -EN 143 - particle filters, type FFP3 / FFP2 - EN 149+A1 - Particle-based half masks; EN 142 - mouth masks).

Hand protection:

Protective working gloves (EN 374). Observe the manufacturer's exact instructions, including the time of use. Replace damaged gloves.

Eye / face protection:

Safety glasses with side-plates or facial shields (EN 166); eye and face protection for work use (EN ISO 16321).

Skin protection:

Working clothes (EN ISO 13688) and footwear (EN ISO 20347 and ISO 20345). Protective clothing against liquid chemicals (EN 14605+A1). Protective clothing against chemicals (EN ISO 14325).

8.2.3 Thermal hazards:

No data available.

8.2.4 Environmental exposure controls:

Avoid unnecessary releases into the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Property	**Value**	**Method**	**Note**
Physical state:	Liquid		
Colour:	Yellow		
Odour:	Characteristic		
Odour threshold:	No data available.		
pH :	9.7 (5% at 20 °C)		
Melting point / freezing point (°C):	No data available.		
Boiling point or initial boiling point and boiling range (°C):	> 100		
Flash point (°C):	> 100		

Evaporation rate:	No data available.		
Flammability (gases, liquids and solids):	Flammable		
Lower and upper explosion limit:	No data available.		
Vapour pressure (20 °C):	No data available.		
Vapour pressure (50 °C):	No data available.		
Relative vapour density:	No data available.		
Density and/or relative density (g/cm³, 15 °C):	0.955		
Solubility (20 °C):	Soluble in water		
Partition coefficient n-octanol/water (log value):	No data available.		
Auto-ignition temperature:	No data available.		
Decomposition temperature:	No data available.		
Kinematic viscosity (mm^2/s):	approx. 190 at 20 °C		
Refractive index (20 °C):	No data available.		
Oxidising properties:	No data available.		
Explosive properties:	No data available.		
Particle characteristics:	No data available.		

9.2 Other information

VOC (%): 2.176

Dry matter content: No data available.

Additional information: No data available.

9.2.1 Information with regard to physical hazard classes

The product has no physical hazards.

9.2.2 Other safety characteristics

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No information is available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Dangerous reactions are not known.

10.4 Conditions to avoid

No information is available.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Hazardous decomposition products are not known.

SECTION 11: Toxicological information

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

Individual components:

2-(2-butoxyethoxy)ethanol (CAS: 112-34-5)

Acute toxicity

Test type	Results	Exposure	Tested organisms
OECD 401, key study	2 410 mg/kg bw, LD50 5 530 mg/kg bw, LD50	oral: gavage	mouse
OECD 402, key study	2 764 mg/kg bw, LD50	dermal	rabbit

key study	> 29 ppm, inhalation risk test	inhalation: aerosol	rat

Serious eye damage / irritation

Test type	Results	Exposure	Tested organisms
OECD 405, weight of evidence	moderately irritating	Eye	rabbit

Skin corrosion / irritation

Test type	Results	Exposure	Tested organisms
OECD 404, key study	slightly irritating	Skin	rabbit

Respiratory or skin sensitisation

Test type	Results	Exposure	Tested organisms
OECD 406, key study	not sensitising	Skin	guinea pig

STOT - single exposure

Test type	Results	Exposure	Tested organisms
	No data available.		

STOT - repeated exposure

Test type	Results	Exposure	Tested organisms
OECD 408, key study	250 mg/kg bw/day (actual dose received), NOAEL 1 000 mg/kg bw/day (nominal) 1 000 mg/kg bw/day (nominal)	oral	rat
OECD 412, supporting study	6 ppm, NOEC 18 ppm, NOAEC	inhalation	rat
OECD 411, key study	< 200 mg/kg bw/day, NOAEL	dermal	rat

Carcinogenicity

Test type	Results	Exposure	Tested organisms
	No data available.		

Germ cell mutagenicity

Test type	Results	Exposure	Tested organisms
OECD 475, key study	negative	oral: gavage	mouse

Reproductive toxicity

Test type	Results	Exposure	Tested organisms
OECD 416, weight of evidence	ca. 1.25 % in diet, NOAEL ca. 1.25 % in diet, NOAEL ca. 2.5 % in diet, NOAEL	oral: drinking water	mouse

Aspiration hazard

Test type	Results	Exposure	Tested organisms
	No data available.		

1-aminopropan-2-ol (CAS: 78-96-6)

Acute toxicity

Test type	Results	Exposure	Tested organisms
OECD 401, key study	2 813 mg/kg bw, LD50	oral: gavage	rat
supporting study	1 851 mg/kg bw, LD50	dermal	rabbit
OECD 403, weight of evidence	> 3 460 mg/m³ air	inhalation: aerosol	rat

Serious eye damage / irritation

Test type	Results	Exposure	Tested organisms
key study	Category 1 (irreversible effects on the eye) based on GHS criteria	Eye	rabbit

Skin corrosion / irritation

Test type	Results	Exposure	Tested organisms
key study	Category 1B (corrosive) based on GHS criteria	Skin	rabbit

Respiratory or skin sensitisation

Test type	Results	Exposure	Tested organisms
	No data available.		

STOT - single exposure

Test type	Results	Exposure	Tested organisms
	No data available.		

STOT - repeated exposure

Test type	Results	Exposure	Tested organisms
OECD 408, weight of evidence	100 mg/kg bw/day (nominal), NOAEL 500 mg/kg bw/day (nominal), NOAEL	oral	rat

Carcinogenicity

Test type	Results	Exposure	Tested organisms
	No data available.		

Germ cell mutagenicity

Test type	Results	Exposure	Tested organisms
OECD 476, key study	negative	In vitro	Chinese hamster Ovary (CHO)

Reproductive toxicity

Test type	Results	Exposure	Tested organisms

OECD 422, weight of evidence	300 mg/kg bw/day, NOAEL 1 000 mg/kg bw/day, NOAEL 1 000 mg/kg bw/day, NOAEL 1 000 mg/kg bw/day, NOAEL	oral: gavage	rat

Aspiration hazard

Test type	Results	Exposure	Tested organisms
	No data available.		

Dicyclohexylamine (CAS: 101-83-7)

Acute toxicity

Test type	Results	Exposure	Tested organisms
key study	200 mg/kg bw, LD50	oral: gavage	rat
key study	200 - 316 mg/kg bw, LD50	dermal	rabbit
key study	> 1.4 mg/L air	inhalation: vapour	rat

Serious eye damage / irritation

Test type	Results	Exposure	Tested organisms
key study	highly irritating	Eye	rabbit

Skin corrosion / irritation

Test type	Results	Exposure	Tested organisms
key study	Category 1B (corrosive) based on GHS criteria	Skin	rabbit

Respiratory or skin sensitisation

Test type	Results	Exposure	Tested organisms
	No data available.		

STOT - single exposure

Test type	Results	Exposure	Tested organisms
	No data available.		

STOT - repeated exposure

Test type	Results	Exposure	Tested organisms
key study	10 mg/kg bw/day (actual dose received), NOAEL 10 mg/kg bw/day (actual dose received)	oral	rat
weight of evidence	11 mg/L air, NOAEL 11 mg/L air	inhalation	rat

Carcinogenicity

Test type	Results	Exposure	Tested organisms
	No data available.		

Germ cell mutagenicity

Test type	Results	Exposure	Tested organisms
OECD 483, key study	negative	oral: gavage	rat
OECD 475, weight of evidence	negative	inhalation	rat

Reproductive toxicity

Test type	Results	Exposure	Tested organisms
OECD 421, key study	40 mg/kg bw/day, NOAEL 40 mg/kg bw/day, NOAEL 80 mg/kg bw/day, NOAEL 40 mg/kg bw/day, NOAEL 80 mg/kg bw/day, NOAEL 40 mg/kg bw/day, NOAEL 40 mg/kg bw/day	oral: gavage	rat

Aspiration hazard

Test type	Results	Exposure	Tested organisms
	No data available.		

3-iodo-2-propynyl butylcarbamate (CAS: 55406-53-6)
Acute toxicity

Test type	Results	Exposure	Tested organisms
OECD 401, key study	1 056 mg/kg bw, LD50 1 795 mg/kg bw, LD50 1 470 mg/kg bw, LD50	oral: gavage	rat
key study	> 2 000 mg/kg bw, LD50	dermal	rabbit
OECD 403, weight of evidence	> 6.89 mg/L air (nominal), LC50	inhalation: dust	rat

Serious eye damage / irritation

Test type	Results	Exposure	Tested organisms
key study	Category 1 (irreversible effects on the eye) based on GHS criteria	Eye	rabbit

Skin corrosion / irritation

Test type	Results	Exposure	Tested organisms
key study	GHS criteria not met	Skin	rabbit

Respiratory or skin sensitisation

Test type	Results	Exposure	Tested organisms
OECD 406, key study	GHS criteria not met	Skin	guinea pig

STOT - single exposure

Test type	Results	Exposure	Tested organisms
	No data available.		

STOT - repeated exposure

Test type	Results	Exposure	Tested organisms
OECD 453, weight of evidence	40 mg/kg bw/day (nominal), LOAEL 20 mg/kg bw/day (nominal), NOAEL	oral	rat
OECD 413, key study	6.7 mg/m³ air (analytical), LOAEC 1.16 mg/m³ air (analytical), NOAEC 0.007 mg/L air (analytical)	inhalation	rat
OECD 411, key study	50 mg/kg bw/day (nominal), NOEL 200 mg/kg bw/day (nominal), NOAEL 500 mg/kg bw/day (nominal), LOAEL	dermal	rat

Carcinogenicity

Test type	Results	Exposure	Tested organisms
OECD 453, weight of evidence	40 mg/kg bw/day (nominal), LOAEL 20 mg/kg bw/day (nominal), NOAEL	oral: feed	rat

Germ cell mutagenicity

Test type	Results	Exposure	Tested organisms
OECD 474, key study	negative	oral: gavage	mouse

Reproductive toxicity

Test type	Results	Exposure	Tested organisms

OECD 416, key study	50.5 mg/kg bw/day (nominal), LOAEL 20.7 mg/kg bw/day (nominal), NOAEL > 49.8 - < 101.2 mg/kg bw/day (nominal), LOAEL > 20.2 - < 39.6 mg/kg bw/day (nominal), NOAEL 62.8 mg/kg bw/day (nominal), LOAEL 26.1 mg/kg bw/day (nominal), NOAEL > 52.7 - < 90.4 mg/kg bw/day (nominal), LOAEL > 20.3 - < 34 mg/kg bw/day (nominal), NOAEL > 750 mg/kg bw/day (nominal), LOAEL > 750 mg/kg bw/day (nominal), NOAEL > 750 mg/kg bw/day (nominal), LOAEL > 750 ppm (nominal), NOAEL	oral: gavage	rat

Aspiration hazard

Test type	Results	Exposure	Tested organisms
	No data available.		

Mixture:

Acute toxicity:	The product does not meet the criteria for classification.
Serious eye damage / irritation:	Causes serious eye irritation.
Skin corrosion / irritation:	Causes skin irritation.
Respiratory or skin sensitisation:	The product does not meet the criteria for classification.
STOT - single exposure:	The product does not meet the criteria for classification.
STOT - repeated exposure:	The product does not meet the criteria for classification.
Carcinogenicity:	The product does not meet the criteria for classification.
Germ cell mutagenicity:	The product does not meet the criteria for classification.
Reproductive toxicity:	The product does not meet the criteria for classification.
Aspiration hazard:	The product does not meet the criteria for classification.

11.2 Information on other hazards

Endocrine disrupting properties

This product does not contain endocrine disruptors in a concentration of 0.1% by weight or higher.

Other information

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects.

2-(2-butoxyethoxy)ethanol (CAS: 112-34-5)

Toxicity	Tested organisms	Results	Test type

Acute toxicity to fish	*Lepomis macrochirus*	1 300 mg/L, LC50 / 96 h	OECD 203
Acute toxicity to invertebrates	*Daphnia magna*	>= 100 mg/L, NOEC / 48 h > 100 mg/L, EC50 / 48 h	
Acute toxicity to aquatic algae	*Raphidocelis subcapitata*	1 101 mg/L, EC50 / 72 h	OECD 201
Biotic degradation		Readily biodegradable (100%), Biotic degradation	
log Kow / log Pow		1 @ 20 °C, log Kow	

1-aminopropan-2-ol (CAS: 78-96-6)

Toxicity	Tested organisms	Results	Test type
Acute toxicity to fish	*Pimephales promelas*	2 520 mg/L, LC50 / 96 h	
Acute toxicity to invertebrates	*Daphnia magna*	62.5 mg/L, EC0 / 48 h 108.82 mg/L, EC50 / 48 h 250 mg/L, EC100 / 48 h	
Acute toxicity to aquatic algae	*Desmodesmus subspicatus*	14.7 mg/L, EC10 / 72 h 19.3 mg/L, EC20 / 72 h 32.3 mg/L, EC50 / 72 h 14 mg/L, EC10 / 72 h 16.1 mg/L, EC20 / 72 h 21.2 mg/L, EC50 / 72 h	
Biotic degradation		Readily biodegradable (100%), Biotic degradation	
log Kow / log Pow		-0.93 @ 23 °C, log Kow	

Dicyclohexylamine (CAS: 101-83-7)

Toxicity	Tested organisms	Results	Test type
Acute toxicity to fish	*Danio rerio*	49.2 mg/L, LC0 / 96 h 62 mg/L, LC50 / 96 h 97.6 mg/L, LC100 / 96 h	
Acute toxicity to invertebrates	*Daphnia magna*	3.7 mg/L, EC0 / 48 h 8 mg/L, EC50 / 48 h 18 mg/L, EC100 / 48 h	OECD 202
Acute toxicity to aquatic algae	*Desmodesmus subspicatus*	> 1 mg/L, EC50 / 72 h 0.016 mg/L, NOEC / 72 h 0.031 mg/L, LOEC / 72 h 0.02 mg/L, EC10 / 72 h 0.38 mg/L, EC50 / 72 h > 0.063 - 0.125 mg/L, EC10 / 72 h	
Biotic degradation		Readily biodegradable (100%), Biotic degradation	
log Kow / log Pow		2.724 @ 25 °C, log Kow	

3-iodo-2-propynyl butylcarbamate (CAS: 55406-53-6)

Toxicity	Tested organisms	Results	Test type

Acute toxicity to fish	*Cyprinodon variegatus*	> 1.1 mg/L, LC50 / 24 h 0.75 mg/L, LC50 / 48 h 0.49 mg/L, LC50 / 72 h 0.41 mg/L, LC50 / 96 h 0.14 mg/L, NOEC / 96 h	
Acute toxicity to invertebrates	*Daphnia magna*	other: 0.645, LC50 / 48 h	
Acute toxicity to aquatic algae	*Desmodesmus subspicatus*	22 µg/L, EC50 / 72 h 5.8 µg/L, EC10 / 72 h > 46 µg/L, EC90 / 72 h 4.6 µg/L, NOEC / 72 h 10 µg/L, LOEC / 72 h 53 µg/L, EC50 / 72 h 13 µg/L, EC10 / 72 h > 46 µg/L, EC90 / 72 h 4.6 µg/L, NOEC / 72 h 10 µg/L, LOEC / 72 h	OECD 201
Biotic degradation		Inherently biodegradable (100%), Biotic degradation	
log Kow / log Pow		2.81 @ 25 °C, log Kow	

12.2 Persistence and degradability

There is no data available for the product.

Biotic degradation: The biodegradability of the component is given in sec. 12.1

12.3 Bioaccumulative potential

There is no data available for the product.

log Kow / log Pow: The value of the partition coefficient of the component is given in sec. 12.1

Bioaccumulation: Data are not available for substances.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This product does not contain any substances which are classified as PBT or vPvB in a concentration of 0.1% by weight or higher.

12.6 Endocrine disrupting properties

This product does not contain endocrine disruptors in a concentration of 0.1% by weight or higher.

12.7 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Catalogue No. of substance/mixture waste:

12 01 07 Mineral-based machining oils free of halogens (except emulsions and solutions)

12 01 09 Machining emulsions and solutions free of halogens

13.1.2 Catalog No. of packaging waste:

15 01 10 Packaging containing residues of or contaminated by dangerous substances

13.1.3 Recommended procedure for substance/mixture waste disposal:

No data available.

13.1.4 Recommended procedure for packaging disposal:

Empty containers must be disposed of in accordance with the applicable waste legislation. After perfect cleaning, the packaging can be used as a secondary raw material for the same purpose. Recommended way of disposing of recycling, burning in a hazardous waste incinerator or storing hazardous waste.

13.1.5 Physical / chemical properties that may affect waste treatment method:

No data available.

13.1.6 Sewage disposal-relevant information:

Protect against weathering. Prevent leakage of waste into the water / soil / sewage system. In case of leakage, inform the competent authorities.

13.1.7 Other disposal recommendations:

Dispose of in accordance with applicable legislation.

SECTION 14: Transport information

	Type of transport	Land transport ADR / RID	Sea transport IMDG	Air Transport ICAO / IATA
14.1	**UN number or ID number**	There is no dangerous good in terms of transport.	There is no dangerous good in terms of transport.	There is no dangerous good in terms of transport.
14.2	**UN proper shipping name**			
14.3	**Transport hazard class(es)**			
	Classification code	-	-	-
	Labels			
14.4	**Packing group**			

14.5 Environmental hazards

Yes.

Classification according to 1272/2008: Chronic (long term) aquatic hazard, category 3, H412

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not specified.

Other information

Type of transport	Land transport ADR / RID	Sea transport IMDG	Air Transport ICAO / IATA
Limited quantities:			
Excepted quantities:			
Transport category:		-	-
Tunnel restriction code:		-	-
Segregation group:	-		-

SECTION 15: Regulatory information

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

all as amended and including implementing regulations

Regulation (EC) No. 1272/2008 (CLP) on classification, labelling and packaging of substances and mixtures,…

Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH),…

Applicable national regulations.

The product contains substance 2-(2-butoxyethoxy)ethanol, that is included in Annex XVII. of REACH Regulation.

15.2 Chemical safety assessment

Chemical safety assessment hasn´t been made.

SECTION 16: Other information

Complete text of all classifications and hazard classes referred to in SECTION 3:

Hazard class:

Acute Tox. 3 - Acute Toxicity, category 3
Acute Tox. 4 - Acute Toxicity, category 4
Aquatic Acute 1 - Acute aquatic toxicity, category 1
Aquatic Chronic 1 - Chronic (long term) aquatic hazard, category 1
Eye Dam. 1 - Serious eye damage, category 1
Eye Irrit. 2 - Eye irritation, category 2
STOT RE 1 - Specific target organ toxicity (repeated exposure), category 1
Skin Corr. 1B - Skin corrosion, category 1B
Skin Sens. 1 - Skin sensitisation, category 1

H-statements:

H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H372 Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Abbreviations

ADR	Accord Dangereuses Route
CAS	Chemical Abstracts Service
DNEL	Derived no-effect level
EC50	Effect concentration for 50%
EINECS	European Inventory of Existing Commercial Chemical Substances
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
LC50	Lethal concentration for 50%
LD50	Lethal dose for 50%
LOAEC	Lowest observable adverse effect concentration
LOAEL	Lowest observable adverse effect level
LOEC	Lowest observable effect concentration
NOAEC	No observable adverse effect concentration
NOAEL	No observable adverse effect level
NOEC	No observable effect concentration
NOEL	No observable effect level
NPK-P	Maximum permissible concentration
OEL	Occupational Exposure Limit (workplace exposure limit - 8 hours / shift)
PBT	Persistent, bioacumulative and toxic
PEL	Permissible exposure limits
PNEC	Predicted no-effect concentration
RID	Regulations for the International Carriage of Dangerous Goods by Rail
STEL	Short Term Exposure Limit (short exposure - corresponds to approx. 15 min.)
VOC	Volatile organic substances
vPvB	Very persistent and very bioacumulative
WGK	Hazard classes for water (Wassergefährdungsklassen)

Changes to previous version SDS:

New SDS developed on the basis of Commission Regulation (EU) 2020/878. The classification was carried out by calculation.

Instructions for training

Workers who come into contact with dangerous substances must be aware of the effects of these substances, how they are treated, and protective measures to the extent necessary.
Furthermore, they must be familiar with the first aid principles, with the necessary sanitation procedures and with the procedures for disaster and accident elimination.
The person handling this chemical product must be familiar with the safety rules and the data given in the safety data sheet.

If a hazardous chemical / mixture is classified as corrosive or toxic, workers should be made aware of the Corrosive / Toxic Chemicals / Mixing Rules.
Persons carrying dangerous substances must be familiar with the ADR / RID accident instructions.

Other information

The above information describes the conditions for safe handling of the product and corresponds to the current knowledge of the manufacturer and serves as instruction for the training of the persons handling the product.
The manufacturer carries guarantee the above-described properties of the product at the recommended use.
The user is responsible for determining the suitability of the product for specific purposes and adapting security measures if such application is contrary to the manufacturer's recommendations.