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

1.1. Product identifier

Jokisch Migma Tano DSY

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

1.3. Details of the supplier of the safety data sheet

Company name:	JOKOBA Technologies GmbH Germany
Street:	Industriestraße 5-10
Place:	D-33813 Oerlinghausen
Telephone:	+49(0)5202/9734-0
E-mail:	info@jokoba.de
Contact person:	Regulatory affairs
E-mail:	MSDS@jokoba.de
Internet:	www.jokisch-fluids.de

1.4. Emergency telephone number:

Emergency telephone number (24h) +1 872 5888271 (JRR) (en)

Further Information

Reserved for industrial and professional use.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard statements

H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains 2-n-butyl-benzo[d]isothiazol-3-one. May produce an allergic reaction.

Precautionary statements

P273	Avoid release to the environment.
P501	Dispose of contents/container to .

2.3. Other hazards

Avoid release to the environment.

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil - unspecified			15 - < 20 %
	265-159-2		01-2119480132-48	
	Asp. Tox. 1; H304			
78-96-6	1-aminopropan-2-ol; isopropanolamine			2.5 - < 5 %
	201-162-7	603-082-00-1	01-2119475331-43	
	Repr. 2, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1; H361f H312 H314 H318			
112-34-5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether			1 - < 2.5 %
	203-961-6		01-2119475104-44	
	Eye Irrit. 2; H319			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated (<5 -9 EO)			1 - < 2.5 %
	500-236-9		01-2119489407-26	
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
929-06-6	2-(2-aminoethoxy)ethan-1-ol			1 - < 2.5 %
	213-195-4		01-2119520701-52	
	Skin Corr. 1C, Eye Dam. 1; H314 H318			
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine			1 - < 2.5 %
	203-312-7		01-2119488970-24	
	Carc. 2, Eye Irrit. 2; H351 H319			
141-43-5	2-aminoethanol; ethanolamine			0.1 - < 1 %
	205-483-3	603-030-00-8		
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1, STOT SE 3, Aquatic Chronic 3; H332 H312 H302 H314 H318 H317 H335 H412			
4299-07-4	2-n-butyl-benzo[d]isothiazol-3-one			0.1 - < 1 %
	420-590-7			
	Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H314 H318 H317 H400 H410			
90-43-7	2-phenylphenol (ISO)biphenyl-2-ol; 2-hydroxybiphenyl			0.1 - < 1 %
	201-993-5		01-2119511183-53	
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H315 H319 H335 H400 H410			
141-43-5	2-aminoethanol; ethanolamine			< 0.1 %
	205-483-3	603-030-00-8	01-2119486455-28	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1, STOT SE 3, Aquatic Chronic 3; H332 H312 H302 H314 H318 H317 H335 H412			
128-04-1	Natriumdimethyldithiocarbamat			< 0.1 %
	204-876-7		01-2119543695-32	
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
64742-56-9	265-159-2	Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil - unspecified	15 - < 20 %
	oral: LD50 = 5000 mg/kg		
78-96-6	201-162-7	1-aminopropan-2-ol; isopropanolamine	2.5 - < 5 %
	dermal: ATE = 1100 mg/kg; oral: LD50 = 2700 mg/kg		
112-34-5	203-961-6	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	1 - < 2.5 %
	dermal: LD50 = 2764 mg/kg; oral: LD50 = 3305 mg/kg		
68920-66-1	500-236-9	Alcohols, C16-18 and C18-unsatd., ethoxylated (<5 -9 EO)	1 - < 2.5 %
	inhalation: LC50 = > 100 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg		
929-06-6	213-195-4	2-(2-aminoethoxy)ethan-1-ol	1 - < 2.5 %
	dermal: LD50 = >3000 mg/kg; oral: LD50 = 3000-3700 mg/kg		
105-59-9	203-312-7	2,2'-(methylimino)diethanol; N-methyldiethanolamine	1 - < 2.5 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 4680 mg/kg		
141-43-5	205-483-3	2-aminoethanol; ethanolamine	0.1 - < 1 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 1025 mg/kg; oral: LD50 = 1515 mg/kg STOT SE 3; H335: >= 5 - 100		
4299-07-4	420-590-7	2-n-butyl-benzo[d]isothiazol-3-one	0.1 - < 1 %
	oral: LD50 = 4267-4732 mg/kg		
90-43-7	201-993-5	2-phenylphenol (ISO)biphenyl-2-ol; 2-hydroxybiphenyl	0.1 - < 1 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 2733 mg/kg		
141-43-5	205-483-3	2-aminoethanol; ethanolamine	< 0.1 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 1025 mg/kg; oral: LD50 = 1515 mg/kg STOT SE 3; H335: >= 5 - 100		
128-04-1	204-876-7	Natriumdimethyldithiocarbamat	< 0.1 %
	dermal: LD50 = 5000 mg/kg; oral: LD50 = 2500 mg/kg Aquatic Acute 1; H400: M=100		

Further Information

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Seek medical attention if problems persist. No administration in cases of unconsiousness or cramps.

After inhalation

Move victim to fresh air. Put victim at rest and keep warm. Call a doctor if you feel unwell.

After contact with skin

Remove contaminated, saturated clothing immediately.After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

After ingestion

Do NOT induce vomiting.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water fog. Foam. Dry extinguishing powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated:
Nitrogen oxides (NOx).
Carbon monoxide
Carbon dioxide (CO2).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

See protective measures under point 7 and 8.
High slip hazard because of leaking or spilled product. Do not breathe mist/vapours/spray. Provide adequate ventilation.

For non-emergency personnel

Take off immediately all contaminated clothing and wash it before reuse.

For emergency responders

The danger areas must be delimited and identified using relevant warning and safety signs. Move victim out of danger zone.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment

Prevent spread over a wide area (e.g. by containment or oil barriers).

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
Clean contaminated articles and floor according to the environmental legislation. Clean with detergents. Avoid solvent cleaners.

6.4. Reference to other sections

Section 7: Handling and Storage
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas.
When using do not eat, drink or smoke.

Further information on handling

When using do not eat, drink or smoke.
High slip hazard because of leaking or spilled product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.
Recommended storage temperature: 5-40 °C

Maximum period of storage (time): 1 year

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67.5		TWA (8 h)	
		15	101.2		STEL (15 min)	
141-43-5	2-Aminoethanol	1	2.5		TWA (8 h)	
		3	7.6		STEL (15 min)	
111-42-2	Diethanolamine (Inhalable Fraction and Vapour)	0.2	1		TWA (8 h)	
141-43-5	Ethanolamine (2-Aminoethanol)	1	2.5		TWA (8 h)	
		3	7.6		STEL (15 min)	
1310-73-2	Sodium hydroxide	-	2		STEL (15 min)	
102-71-6	Triethanolamine	-	5		TWA (8 h)	

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil - unspecified			
Worker DNEL, long-term		inhalation	systemic	2,73 mg/m³
Worker DNEL, long-term		inhalation	local	5,58 mg/m³
Worker DNEL, long-term		dermal	systemic	0,97 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day
Consumer DNEL, long-term		inhalation	local	1,19 mg/m³
102-71-6	Triethanolamin			
Worker DNEL, long-term		inhalation	local	1 mg/m³
Worker DNEL, long-term		dermal	systemic	7,5 mg/kg bw/day
Consumer DNEL, long-term		inhalation	local	0,4 mg/m³
Consumer DNEL, long-term		dermal	local	2,66 mg/person/day
Consumer DNEL, long-term		oral	systemic	3,3 mg/kg bw/day
78-96-6	1-aminopropan-2-ol; isopropanolamine			
Worker DNEL, long-term		inhalation	systemic	3,6 mg/m³
Consumer DNEL, long-term		oral	systemic	0,76 mg/kg bw/day
112-34-5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether			
Worker DNEL, long-term		dermal	systemic	83 mg/kg bw/day
Consumer DNEL, acute		inhalation	local	60,7 mg/m³
Worker DNEL, long-term		inhalation	local	67,5 mg/m³
Consumer DNEL, long-term		inhalation	local	40,5 mg/m³
Consumer DNEL, long-term		inhalation	systemic	40,5 mg/m³
Worker DNEL, long-term		inhalation	systemic	67,5 mg/m³
Worker DNEL, acute		inhalation	local	101,2 mg/m³
Consumer DNEL, long-term		dermal	systemic	50 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	5 mg/kg bw/day
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated (<5 -9 EO)			
Worker DNEL, long-term		inhalation	systemic	294 mg/m³
Worker DNEL, long-term		dermal	systemic	2080 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	87 mg/m³
Consumer DNEL, long-term		dermal	systemic	1250 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	25 mg/kg bw/day
929-06-6	2-(2-aminoethoxy)ethan-1-ol			
Worker DNEL, long-term		inhalation	systemic	1,12 mg/m³
Worker DNEL, long-term		inhalation	local	0,67 mg/m³
Worker DNEL, long-term		dermal	systemic	7,3 mg/kg bw/day
Worker DNEL, acute		dermal	local	0,032 mg/cm²
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine			

Worker DNEL, long-term	inhalation	systemic	7,9 mg/m³
Worker DNEL, long-term	dermal	systemic	5,6 mg/kg bw/day
Worker DNEL, long-term	dermal	local	0,05 mg/cm²
Consumer DNEL, long-term	inhalation	systemic	0,4 mg/m³
Consumer DNEL, long-term	dermal	systemic	0,67 mg/kg bw/day
Consumer DNEL, long-term	dermal	local	0,03 mg/cm²
Consumer DNEL, long-term	oral	systemic	0,13 mg/kg bw/day
141-43-5	2-aminoethanol; ethanolamine		
Worker DNEL, long-term	inhalation	systemic	1 mg/m³
Worker DNEL, long-term	inhalation	local	0,51 mg/m³
Worker DNEL, long-term	dermal	systemic	3 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,18 mg/m³
Consumer DNEL, long-term	inhalation	local	0,28 mg/m³
Consumer DNEL, long-term	dermal	systemic	1,5 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	1,5 mg/kg bw/day
90-43-7	2-phenylphenol (ISO)biphenyl-2-ol; 2-hydroxybiphenyl		
Worker DNEL, long-term	inhalation	systemic	19,25 mg/m³
Worker DNEL, long-term	dermal	systemic	21,84 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	1,2 mg/m³
Consumer DNEL, long-term	dermal	systemic	0,4 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,4 mg/kg bw/day
111-42-2	2,2'-iminodiethanol; diethanolamine		
Worker DNEL, long-term	inhalation	systemic	0,75 mg/m³
Consumer DNEL, long-term	inhalation	systemic	0,125 mg/m³
Worker DNEL, long-term	inhalation	local	0,5 mg/m³
Consumer DNEL, long-term	inhalation	local	0,125 mg/m³
Worker DNEL, long-term	dermal	systemic	0,130 mg/kg bw/day
Consumer DNEL, long-term	dermal	systemic	0,07 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,06 mg/kg bw/day
141-43-5	2-aminoethanol; ethanolamine		
Worker DNEL, long-term	inhalation	systemic	1 mg/m³
Worker DNEL, long-term	inhalation	local	0,51 mg/m³
Worker DNEL, long-term	dermal	systemic	3 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,18 mg/m³
Consumer DNEL, long-term	inhalation	local	0,28 mg/m³
Consumer DNEL, long-term	dermal	systemic	1,5 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	1,5 mg/kg bw/day
128-04-1	Natriumdimethyldithiocarbamat		
Worker DNEL, long-term	inhalation	systemic	0,930 mg/m³

Worker DNEL, long-term	dermal	systemic	2,71 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,230 mg/m³
Consumer DNEL, long-term	dermal	systemic	1,35 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,100 mg/kg bw/day
1310-73-2 Sodium hydroxide; caustic soda			
Worker DNEL, long-term	inhalation	local	1 mg/m³
Consumer DNEL, long-term	inhalation	local	1 mg/m³

PNEC values

CAS No	Substance
Environmental compartment	Value
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil - unspecified
Secondary poisoning	9,33 mg/kg
102-71-6	Triethanolamin
Freshwater	0,32 mg/l
Marine water	0,32 mg/l
Freshwater sediment	1,7 mg/kg
Marine sediment	0,17 mg/kg
Microorganisms in sewage treatment plants (STP)	10 mg/l
Soil	0,151 mg/kg
78-96-6	1-aminopropan-2-ol; isopropanolamine
Freshwater	0,033 mg/l
Marine water	0,003 mg/l
Freshwater sediment	0,229 mg/kg
Marine sediment	0,023 mg/kg
Microorganisms in sewage treatment plants (STP)	3,3 mg/l
Soil	0,026 mg/kg
112-34-5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Freshwater	1,1 mg/l
Marine water	0,11 mg/l
Freshwater sediment	4,4 mg/kg
Marine sediment	0,44 mg/kg
Secondary poisoning	56 mg/kg
Microorganisms in sewage treatment plants (STP)	200 mg/l
Soil	0,4 mg/kg
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated (<5 -9 EO)
Freshwater	0,007 mg/l
Marine water	0,001 mg/l
Freshwater sediment	22,79 mg/kg
Marine sediment	2,28 mg/kg
Secondary poisoning	10 mg/l
Soil	1,0 mg/kg
929-06-6	2-(2-aminoethoxy)ethan-1-ol
Freshwater	0,202 mg/l
Freshwater (intermittent releases)	0,945 mg/l
Marine water	0,0202 mg/l
Marine water (intermittent releases)	0,0945 mg/l
Freshwater sediment	0,99 mg/kg
Marine sediment	0,103 mg/kg
Microorganisms in sewage treatment plants (STP)	28 mg/l
Soil	0,0704 mg/kg

105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine
Freshwater	0,1 mg/l
Marine water	0,004 mg/l
Freshwater sediment	0,78 mg/kg
Marine sediment	0,035 mg/kg
Microorganisms in sewage treatment plants (STP)	10 mg/l
Soil	0,097 mg/kg
141-43-5	2-aminoethanol; ethanolamine
Freshwater	0,07 mg/l
Marine water	0,007 mg/l
Freshwater sediment	0,375 mg/kg
Marine sediment	0,036 mg/kg
Microorganisms in sewage treatment plants (STP)	100 mg/l
Soil	1,29 mg/kg
90-43-7	2-phenylphenol (ISO)biphenyl-2-ol; 2-hydroxybiphenyl
Freshwater	0,00009 mg/l
Marine water	0,00009 mg/l
Marine water (intermittent releases)	0,027 mg/l
Freshwater sediment	0,1284 mg/kg
Marine sediment	0,01284 mg/kg
Soil	2,5 mg/kg
111-42-2	2,2'-iminodiethanol; diethanolamine
Freshwater	0,021 mg/l
Marine water	0,002 mg/l
Freshwater sediment	0,092 mg/kg
Marine sediment	0,0092 mg/kg
Soil	1,63 mg/kg
141-43-5	2-aminoethanol; ethanolamine
Freshwater	0,07 mg/l
Marine water	0,007 mg/l
Freshwater sediment	0,357 mg/kg
Marine sediment	0,036 mg/kg
Microorganisms in sewage treatment plants (STP)	100 mg/l
Soil	1,29 mg/kg
128-04-1	Natriumdimethyldithiocarbamat
Freshwater	0,000014 mg/l
Marine water	0,0000014 mg/l
Freshwater sediment	0,00005476 mg/kg
Marine sediment	0,000005476 mg/kg
Soil	0,1652 mg/l

8.2. Exposure controls






Individual protection measures, such as personal protective equipment

Eye/face protection

EN 166

Hand protection

Protect skin by using skin protective cream.
Wash hands before breaks and after work.
Gloves of appropriate material (i.e. nitrilic rubber, specification: penetration time: level 6, >480 min., thickness 0,9-1 mm; CE-certified acc. EN 374 cat III)

Skin protection

Chemical resistant safety shoes.
Take off immediately all contaminated clothing.
Thorough skin-cleansing after handling the product.
Set out skin protection guidelines.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Thermal hazards

Remove all sources of ignition.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	light brown
Odour:	characteristic
Odour threshold:	characteristic

		Test method
Boiling point or initial boiling point and boiling range:	not determined	
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Flash point:	142 °C	ASTM D 92
Auto-ignition temperature:	not determined	
pH-Value (at 20 °C):	10,9 (5% 9,6)	DIN 51369
Viscosity / kinematic: (at 20 °C)	41 mm²/s	ASTM D 7042
Vapour pressure:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	0,97 g/cm³	EN ISO 12185

9.2. Other information

Other safety characteristics

Pour point:	not determined
Viscosity / dynamic:	not determined

Further Information

in aqueous solution 5% pH 9,6

SECTION 10: Stability and reactivity

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Protect against: heat.

10.5. Incompatible materials

The following must be prevented: Oxidizing agents, strong. acid.

10.6. Hazardous decomposition products

Hazardous decomposition products: none

SECTION 11: Toxicological information

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

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalativ Dampf) > 20 mg/l; ATE (inhalativ Staub/Nebel) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil - unspecified				
	oral	LD50 5000 mg/kg	Rat	ECHA	OECD Guideline 420
78-96-6	1-aminopropan-2-ol; isopropanolamine				
	oral	LD50 2700 mg/kg	Rat		
	dermal	ATE 1100 mg/kg			
112-34-5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether				
	oral	LD50 3305 mg/kg	Rat		
	dermal	LD50 2764 mg/kg	Rabit		
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated (<5 -9 EO)				
	oral	LD50 > 2000 mg/kg	Rat	ECHA	OECD 401
	dermal	LD50 > 2000 mg/kg	Rabbit	ECHA	OECD 402
	inhalation (4 h) vapour	LC50 > 100 mg/l	Rat	ECHA	OECD 403
929-06-6	2-(2-aminoethoxy)ethan-1-ol				
	oral	LD50 3000-3700 mg/kg	RAT	ECHA	BASF-Test
	dermal	LD50 >3000 mg/kg	RABBIT	Echa	OECD 402
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine				
	oral	LD50 4680 mg/kg	Rat		OECD 401
	dermal	LD50 > 2000 mg/kg	Rabit		
141-43-5	2-aminoethanol; ethanolamine				
	oral	LD50 1515 mg/kg	Rat		
	dermal	LD50 1025 mg/kg	Rabbit	IUCLID	
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			
4299-07-4	2-n-butyl-benzo[d]isothiazol-3-one				
	oral	LD50 4267-4732 mg/kg	Rat		
90-43-7	2-phenylphenol (ISO)biphenyl-2-ol; 2-hydroxybiphenyl				
	oral	LD50 2733 mg/kg	Rat		OECD 401
	dermal	LD50 > 2000 mg/kg	Rabbit		OECD 402
141-43-5	2-aminoethanol; ethanolamine				
	oral	LD50 1515 mg/kg	Rat		

	dermal	LD50 mg/kg	1025	Rabbit	IUCLID	
	inhalation vapour	ATE	11 mg/l			
	inhalation dust/mist	ATE	1,5 mg/l			
128-04-1	Natriumdimethyldithiocarbamat					
	oral	LD50 mg/kg	2500	Rat	ECHA	
	dermal	LD50 mg/kg	5000	Rat	ECHA	

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.
Contains 2-n-butyl-benzo[d]isothiazol-3-one. May produce an allergic reaction.
No data available

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
No data available

STOT-single exposure

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

STOT-repeated exposure

Based on available data, the classification criteria are not met.
No data available

Aspiration hazard

Based on available data, the classification criteria are not met.
No data available

Additional information on tests

No risks worthy of mention. Practical experience.
The statement is derived from the properties of the single components.
The classification was undertaken in accordance with the calculation method governed by the Preparations Directive (1999/45/EC).

11.2. Information on other hazards

Endocrine disrupting properties

Based on available data, the classification criteria are not met.
This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil - unspecified						
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Dickkopfelritze		
	Acute algae toxicity	ErC50 mg/l	> 100		Grünalgen		
	Acute crustacea toxicity	EC50 mg/l	> 1000	48 h	Daphnia magna		
	Crustacea toxicity	NOEC mg/l	10,0	21 d	Daphnia magna		
78-96-6	1-aminopropan-2-ol; isopropanolamine						
	Acute fish toxicity	LC50 mg/l	220 - 460	96 h	Leuciscus idus	IUCLID	
	Acute crustacea toxicity	EC50 mg/l	108,8	48 h	Daphnia magna	IUCLID	
112-34-5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether						
	Acute fish toxicity	LC50 mg/l	2500	96 h	Leopomis macrochirus		static methode
	Acute algae toxicity	ErC50 mg/l	> 100	96 h	Scenedesmus subspicatus		static methode
	Acute crustacea toxicity	EC50 mg/l	> 1000	48 h	Daphnia magna		static methode
	Acute bacteria toxicity	EC50 mg/l ( )	> 1000				static methode 0,1d
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated (<5 -9 EO)						
	Acute fish toxicity	LC50	108 mg/l	96 h	Danio rerio (zebrafish)	ECHA	OECD 203
	Acute algae toxicity	ErC50 mg/l	> 10	72 h	Pseudokirchneriella subcapitata	ECHA	OECD 201
	Acute crustacea toxicity	EC50	51 mg/l	48 h	Daphnia magna	ECHA	
	Acute bacteria toxicity	EC50 mg/l ( )	>1000		Activated sludge		OECD 209
929-06-6	2-(2-aminoethoxy)ethan-1-ol						
	Acute fish toxicity	LC50	460 mg/l	96 h	Goldorfe		
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine						
	Acute fish toxicity	LC50 mg/l	1466	96 h	Leuciscus idus		DIN38412
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Pseudokirchneriella sub.		DIN 38412
	Acute crustacea toxicity	EC50	233 mg/l	48 h	Daphnia magna		EU C.2
	Algae toxicity	NOEC mg/l	6,25	3 d	Desmodesmus subspicatus		DIN 38412
141-43-5	2-aminoethanol; ethanolamine						
	Acute fish toxicity	LC50	150 mg/l	96 h	Oncorhynchus mykiss	IUCLID	
	Acute algae toxicity	ErC50	22 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50	65 mg/l	48 h	Daphnia magna		
4299-07-4	2-n-butyl-benzo[d]isothiazol-3-one						
	Acute fish toxicity	LC50 mg/l	0,15	96 h	Oncorhynchus mykiss		OECD 203
90-43-7	2-phenylphenol (ISO)biphenyl-2-ol; 2-hydroxybiphenyl						

	Acute fish toxicity	LC50	4,5 mg/l	96 h	Danio rerio	Echa	
	Acute crustacea toxicity	EC50	2,7 mg/l	48 h	Daphnia magna		
	Acute bacteria toxicity	EC50 mg/l ( )	3,57	3 h	Pseudokirchneriella subcapitata		
141-43-5	2-aminoethanol; ethanolamine						
	Acute fish toxicity	LC50	150 mg/l	96 h	Oncorhynchus mykiss	IUCLID	
	Acute algae toxicity	ErC50	22 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50	65 mg/l	48 h	Daphnia magna		

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil - unspecified			
	OECD TG 301 B	30%	28	
	Inhärenter Schlamm	30 %	28	
112-34-5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether			
	OECD 301C / ISO 9408	89 %	28	
	Product is biodegradable.			
	OECD 302B	100 %	28	
	Product is biodegradable.			
	OECD TG 301 E	94 %	28	
	Product is biodegradable.			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated (<5 -9 EO)			
	OECD 301 B	> 70 %	28	
	Product is biodegradable.			
929-06-6	2-(2-aminoethoxy)ethan-1-ol			
	OECD guideline 302B	84%	28	
	Easily biodegradable (concerning to the criteria of the OECD)			
	OECD guideline 301A	90-100%	17	
	Easily biodegradable (concerning to the criteria of the OECD)			
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine			
	OECD guideline 301 A	96%	18	
	readily biodegradable			
	OECD 302B	95%	14	
	inherently biodegradable			
	OECD 306	15%	63	
	not readily biodegradable			
90-43-7	2-phenylphenol (ISO)biphenyl-2-ol; 2-hydroxybiphenyl			
	OECD 301D	75%	28	
	Easily biodegradable (concerning to the criteria of the OECD)			
	OECD 301B	70-75 %	28	
	Easily biodegradable (concerning to the criteria of the OECD)			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
78-96-6	1-aminopropan-2-ol; isopropanolamine	-0,96
112-34-5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	0,29
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated (<5 -9 EO)	6,13
929-06-6	2-(2-aminoethoxy)ethan-1-ol	-1,89
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine	-1,16
141-43-5	2-aminoethanol; ethanolamine	-1,91
4299-07-4	2-n-butyl-benzo[d]isothiazol-3-one	<= 4,0
90-43-7	2-phenylphenol (ISO)biphenyl-2-ol; 2-hydroxybiphenyl	3,18
141-43-5	2-aminoethanol; ethanolamine	-1,91

BCF

CAS No	Chemical name	BCF	Species	Source
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine	0,7-3,2		
90-43-7	2-phenylphenol (ISO)biphenyl-2-ol; 2-hydroxybiphenyl	22		

12.4. Mobility in soil

in delivery condition: liquid

12.5. Results of PBT and vPvB assessment

Based on available data, the classification criteria are not met.
none according to Regulation (EC) No. 1907/2006 (REACH)

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Completely emptied packings can be re-cycled. Dispose of waste according to applicable legislation.
Dispose of contents/container to an appropriate recycling or disposal facility. Consult the local waste disposal expert about waste disposal.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

List of Wastes Code - residues/unused products

120107 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; mineral-based machining oils free of halogens (except emulsions and solutions); hazardous waste

List of Wastes Code - used product

120109 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; machining emulsions and solutions free of halogens; hazardous waste

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es):	No dangerous good in sense of these transport regulations.
14.4. Packing group:	No dangerous good in sense of these transport regulations.

Other applicable information (land transport)

No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

14.1. UN number or ID number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es):	No dangerous good in sense of these transport regulations.
14.4. Packing group:	No dangerous good in sense of these transport regulations.

Other applicable information (inland waterways transport)

No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

14.1. UN number or ID number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es):	No dangerous good in sense of these transport regulations.
14.4. Packing group:	-

Other applicable information (marine transport)

No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es):	No dangerous good in sense of these transport regulations.
14.4. Packing group:	-

Other applicable information (air transport)

No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Personal protection equipment: see section 8

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Directive 2010/75/EU on industrial emissions:	0,0
Directive 2004/42/EC on VOC in paints and varnishes:	5,336 % (51,755 g/l)
Information according to Directive 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,4,6,7,9,11,12,13,14,15,16.
AICS (Australien), DSL (Kanada), IECSC (China), REACH (Europäische Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (Neuseeland), PICCS (Philippinen), TSCA (USA)

Abbreviations and acronyms

Acute Tox. 4: Acute toxicity, hazard category 4
Asp. Tox. 1: Aspiration hazard, hazard category 1
Skin Corr. 1B: Skin corrosion, sub-category 1B
Skin Corr. 1C: Skin corrosion, sub-category 1C
Skin Irrit. 2: Skin irritation, hazard category 2
Eye Dam. 1: Serious eye damage, hazard category 1
Eye Irrit. 2: Eye irritation, hazard category 2
Skin Sens. 1: Skin sensitisation, hazard category 1
Carc. 2: Carcinogenicity, hazard category 2
Repr. 2: Reproductive toxicity, hazard category 2
STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3
Aquatic Acute 1: Hazardous to the aquatic environment, hazard category: Acute 1
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard category: Chronic 1
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard category: Chronic 3
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern
Repr. - Reproduktionstoxizität
Asp. Tox. - Aspirationstoxizität
Acute Tox. - Akute Toxizität
Aquatic Acute - Akute aquatische Toxizität
Aquatic Chronic - Chronische aquatische Toxizität
Eye Dam. - Augenschaden/-reizung
Eye Irrit. - Augenreizung

Skin Corr. - Ätzwirkung auf die Haut
Skin Irrit. - Hautreizung
Skin Sens. - Hautallergen
Resp. Sens. - Inhalationsallergen
STOT SE - Spezifische Zielorgan-Toxizität - einmalige Exposition
STOT RE - Spezifische Zielorgan-Toxizität - wiederholte Exposition
VOC - Flüchtige organische Verbindungen

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains 2-n-butyl-benzo[d]isothiazol-3-one. May produce an allergic reaction.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)