Safety Data Sheet

according to Regulation (EC) No 1907/2006

Wesynt 94: MB-PM024

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

1.1. Product identifier

Wesynt 94: MB-PM024

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

Use of the substance/mixture

Industrial use resulting in manufacture of another substance (use of intermediates)

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	Thierry GmbH	
Street:	Motorstrasse 30	
Place:	D-70499 Stuttgart	
Telephone:	+49 (0)711 8399 7470	Telefax: +49 (0)711 8399 7480
E-mail:	info@thierry-gmbh.de	
Contact person:	Veronika Krieger	Telephone: 0711/839974-0
Internet:	www.thierry-gmbh.de	

1.4. Emergency telephone number:

Emergency medical information: Poison Information Center Mainz - Tel: +49 (6131) 19240

Further Information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 2; H225
Acute Tox. 4; H332
Asp. Tox. 1; H304
Skin Irrit. 2; H315
Repr. 2; H361d
STOT SE 3; H336
STOT RE 2; H373
Aquatic Acute 1; H400
Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

2,2,4-trimethylpentane
p-xylene
toluene
heptane; n-heptane

Signal word: Danger

Pictograms:

Hazard statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing and eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.

2.3. Other hazards

In use, may form flammable/explosive vapour-air mixture.
The substances in the mixture (>0,1%) do not meet the PBT/vPvB criteria according to REACH, annex XIII.
This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to humans as no components meets the criteria. This product does not contain a substance (> 0,1 %) that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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)			
540-84-1	2,2,4-trimethylpentane			40 - < 45 %
	208-759-1	601-009-00-8		
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H225 H315 H336 H304 H400 H410			
106-42-3	p-xylene			30 - < 35 %
	203-396-5	601-022-00-9		
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315			
108-88-3	toluene			10 - < 12 %
	203-625-9	601-021-00-3		
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H225 H361d H315 H336 H373 H304			
142-82-5	heptane; n-heptane			10 - < 12 %
	205-563-8	601-008-00-2		
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H225 H315 H336 H304 H400 H410			
109-66-0	pentane			7 - < 10 %
	203-692-4	601-006-00-1		

	Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H336 H304 H411 EUH066			
64-17-5	ethanol; ethyl alcohol			3 - < 5 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			

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		
106-42-3	203-396-5	p-xylene	30 - < 35 %
	inhalation: LC50 = 27,124 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 12126 mg/kg; oral: LD50 = >5000 mg/kg		
108-88-3	203-625-9	toluene	10 - < 12 %
	inhalation: LC50 = 28,1 mg/l (vapours); dermal: LD50 = >5000 mg/kg; oral: LD50 = >5000 mg/kg		
142-82-5	205-563-8	heptane; n-heptane	10 - < 12 %
	inhalation: LC50 = > 29,29 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg		
64-17-5	200-578-6	ethanol; ethyl alcohol	3 - < 5 %
	inhalation: LC50 = 124,7 mg/l (vapours); oral: LD50 = 10470 mg/kg Eye Irrit. 2; H319: >= 50 - 100		

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

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

Take off immediately all contaminated clothing.

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration. If experiencing respiratory symptoms: Call a doctor.

After contact with skin

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.

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

See sections 2 and 11

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol resistant 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: Carbon monoxide (CO). Carbon dioxide (CO2).

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Remove persons to safety. Provide adequate ventilation. Remove all sources of ignition.
Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.
Wear personal protection equipment (refer to section 8).

For non-emergency personnel

Remove persons to safety. Remove all sources of ignition. Ventilate affected area.
Wear personal protective equipment. (See section 8.)

For emergency responders

No special measures are necessary.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Discharge into the environment must be avoided. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ventilate affected area.
Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

Other information

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7
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

Provide adequate ventilation.
Wear suitable protective clothing. (See section 8.)

Avoid contact with skin, eyes and clothes.
Do not breathe vapour/aerosol.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.
Heating causes rise in pressure with risk of bursting.

Advice on general occupational hygiene

Always close containers tightly after the removal of product. When using do not eat, drink or smoke. Wash hands before breaks and after work. Remove contaminated clothing immediatley and dispose off safely.

Further information on handling

Flammable vapours can accumulate in head space of closed systems.
General protection and hygiene measures: refer to section 8

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep container dry.
Make sure spills can be contained (e.g. sump pallets or kerbed areas).
Ensure adequate ventilation of the storage area.

Hints on joint storage

Do not store together with: Gas. Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases. Oxidizing liquids. Oxidizing solids. ammonium nitrate. Self-reactive substances and mixtures. Organic peroxides. Non-combustible toxic substances. Radioactive substances. Infectious substances.

Further information on storage conditions

Protect against: frost. UV-radiation/sunlight. heat. Cold Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

CAS No	Name of agent	ppm	mg/m³	fib/cm³	Category	Origin
106-42-3	p-Xylene	50	221		TWA (8 h)	
		100	442		STEL (15 min)	
108-88-3	Toluene	50	192		TWA (8 h)	
		100	384		STEL (15 min)	

DNEL/DMEL values

CAS No	Name of agent			
DNEL type		Exposure route	Effect	Value
109-66-0	pentane			
Worker DNEL, long-term		inhalation	systemic	3000 mg/m³
Worker DNEL, long-term		dermal	systemic	432 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	643 mg/m³
Consumer DNEL, long-term		dermal	systemic	214 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	214 mg/kg bw/day
64-17-5	ethanol; ethyl alcohol			
Worker DNEL, long-term		inhalation	systemic	380 mg/m³

Worker DNEL, acute	inhalation	local	1900 mg/m³
Worker DNEL, long-term	dermal	systemic	343 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	114 mg/m³
Consumer DNEL, acute	inhalation	local	950 mg/m³
Consumer DNEL, long-term	dermal	systemic	206 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	87 mg/kg bw/day

PNEC values

CAS No	Name of agent
Environmental compartment	Value
109-66-0	pentane
Freshwater	0,23 mg/l
Freshwater (intermittent releases)	0,88 mg/l
Marine water	0,23 mg/l
Freshwater sediment	1,2 mg/kg
Marine sediment	1,2 mg/kg
Micro-organisms in sewage treatment plants (STP)	3,6 mg/l
Soil	0,55 mg/kg
64-17-5	ethanol; ethyl alcohol
Freshwater	0,96 mg/l
Freshwater (intermittent releases)	2,75 mg/l
Marine water	0,79 mg/l
Freshwater sediment	3,6 mg/kg
Marine sediment	2,9 mg/kg
Secondary poisoning	380 mg/kg
Micro-organisms in sewage treatment plants (STP)	580 mg/l
Soil	0,63 mg/kg

8.2. Exposure controls




Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Eye glasses with side protection.

Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves.
Suitable material:
(Penetration time (maximum wearing period): >= 8 Stunden):
FKM (fluororubber).
Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.
The selected protective gloves have to satisfy the specifications of EU Directive EC/ 2016/425 and the standard EN 374 derived from it.

Skin protection

Wear fire/flame resistant/retardant clothing.

Respiratory protection

Respiratory protection necessary at:
Exceeding exposure limit values
Insufficient ventilation
Suitable respiratory protection apparatus:
Protective respiration apparatus not using surrounding air (breathing apparatus) (DIN EN 133).
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	characteristic
Odour threshold:	not determined

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	<21 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not relevant
pH-Value:	not determined
Viscosity / kinematic:	not determined
Water solubility:	not determined

Solubility in other solvents
not determined

Dissolution rate:	not relevant
Partition coefficient n-octanol/water:	SECTION 12: Ecological information
Dispersion stability:	not relevant
Vapour pressure:	not determined
Density:	not determined
Bulk density:	not relevant
Relative vapour density:	not determined
Particle characteristics:	not relevant

9.2. Other information

Information with regard to physical hazard classes

Explosive properties
In use, may form flammable/explosive vapour-air mixture.

Self-ignition temperature

Gas:	not determined

Oxidizing properties
none

Other safety characteristics

Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined
Solid content:	not determined
Sublimation point:	not relevant
Softening point:	not relevant
Pour point:	not determined
Viscosity / dynamic:	not determined
Flow time:	not determined

Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Protect against: Light. UV-radiation/sunlight. heat. Cold. moisture.

10.5. Incompatible materials

Materials to avoid: Strong acid. strong alkalis. Oxidizing agents, strong. Peroxides. Reducing agents, strong.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO_2).

SECTION 11: Toxicological information

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

Toxicocinetics, metabolism and distribution

No data available.

Acute toxicity

Harmful if inhaled.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
106-42-3	p-xylene				
	oral	LD50 >5000 mg/kg	Mouse.	ECHA Dossier	
	dermal	LD50 12126 mg/kg	Rabbit.	ECHA Dossier	
	inhalation (4 h) vapour	LC50 27,124 mg/l	Rat.	ECHA Dossier	
	inhalation dust/mist	ATE 1,5 mg/l			
108-88-3	toluene				
	oral	LD50 >5000 mg/kg	Rat	REACH Dossier	
	dermal	LD50 >5000 mg/kg	Rabbit	REACH Dossier	
	inhalation (4 h) vapour	LC50 28,1 mg/l	Rat	REACH Dossier	

142-82-5	heptane; n-heptane					
	oral	LD50 mg/kg	> 5000	Rat	ECHA Dossier	OECD Guideline 401
	dermal	LD50 mg/kg	> 2000	Rabbit	ECHA Dossier	OECD Guideline 402
	inhalation (4 h) vapour	LC50 mg/l	> 29,29	Rat	ECHA Dossier	OECD Guideline 403
64-17-5	ethanol; ethyl alcohol					
	oral	LD50 mg/kg	10470	Rat	REACH Dossier	OECD Guideline 401
	inhalation (4 h) vapour	LC50 mg/l	124,7	Rat	REACH Dossier	OECD Guideline 403

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.
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.

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging the unborn child. (toluene)
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
p-xylene (CAS-No.: 106-42-3):
In-vitro mutagenicity: No experimental indications of mutagenicity in-vivo exist.
Carcinogenicity:
Exposure time: 103 weeks
Species: Rat
Method: EU Method B.32 (Carcinogenicity Test)
Result: negative.
Reproductive toxicity:
Exposure time: 70d
Species: Rat
Method: EPA OPPTS 870.3800 (Reproduction and Fertility Effects)
Result: NOAEC >= 500 ppm
Developmental toxicity/teratogenicity:
Exposure time: 21d
Species: Sprague-Dawley Rat
Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study)
Result: BMCL10 = 720 ppm (maternal toxicity)
Result: BMCL10 = 965 ppm (developmental toxicity)
Literature information: REACH Dossier

toluene (CAS-No.: 108-88-3):
In-vitro mutagenicity: No experimental indications of mutagenicity in-vivo exist.
Reproductive toxicity:
Exposure time: 95d
Species: Rat
Method: OECD Guideline 416
Result: NOAEC = 500 ppm
Developmental toxicity/teratogenicity:
Exposure time: 20d
Species: Rat.
Method: EPA OTS 798.4350 (Inhalation Developmental Toxicity Screen)
Result: NOAEC = 750 ppm (maternal toxicity)

Result: NOAEC = 750 ppm (developmental toxicity)
Literature information: REACH Dossier

Ethanol. (CAS-No.: 64-17-5):
In-vitro mutagenicity: No experimental indications of mutagenicity in-vivo exist.
Reproductive toxicity:
Exposure time: 18 weeks
Species: CD-1 Mouse.
Method: OECD Guideline 416
Result: NOAEL = 20700 mg/kg/day
Developmental toxicity/teratogenicity:
Exposure time: 19d
Species: Sprague-Dawley Rat.
Method: OECD Guideline 414
Result: NOAEL = 16000 ppm (maternal toxicity)
Result: NOAEL >= 20000 ppm (teratogenicity)
Literature information: REACH Dossier

2,2,4-trimethylpentane (CAS-No.: 540-84-1):
In-vitro mutagenicity: No experimental indications of mutagenicity in-vivo exist.
Literature information: REACH Dossier

pentane (CAS-No.: 109-66-0):
In-vitro mutagenicity: No experimental indications of mutagenicity in-vivo exist.
Developmental toxicity/teratogenicity:
Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study)
Exposure time: 21d
Species: Rat
Result: NOAEL = 1000 mg/kg/day
Literature information: REACH Dossier

heptane; n-heptane (CAS-No.: 142-82-5):
In-vitro mutagenicity: No experimental indications of mutagenicity in-vivo exist.
Literature information: REACH Dossier

STOT-single exposure

May cause drowsiness or dizziness. (2,2,4-trimethylpentane)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (toluene)
p-xylene (CAS-No.: 106-42-3):
Subchronic oral toxicity
Exposure time: 90d
Species: Sprague-Dawley Rat
Method: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Result: NOAEL = 150 mg/kg bw/day
Literature information: REACH Dossier

toluene (CAS-No.: 108-88-3):
Subchronic oral toxicity
Exposure time: 13 weeks
Species: Mouse.
Method: OECD Guideline 408
Result: NOAEL = 625 mg/kg bw/day
Literature information: REACH Dossier

Ethanol. (CAS-No.: 64-17-5):

Subchronic oral toxicity
Exposure time: 90d
Species: Sprague-Dawley Rat.
Method: OECD Guideline 408
Result: NOAEL = 1280 mg/kg
Literature information: REACH Dossier

pentane (CAS-No.: 109-66-0):
Subchronic inhalation toxicity:
Method: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)
Exposure time: 90d
Species: Rat
Result: NOAEC = 20000 mg/m3
Literature information: REACH Dossier

heptane; n-heptane (CAS-No.: 142-82-5):
Subchronic inhalation toxicity:
Method: -
Exposure time: 90d
Species: Rat
Result: NOAEC = 12470 mg/m3
Literature information: REACH Dossier

Aspiration hazard

May be fatal if swallowed and enters airways.

Specific effects in experiment on an animal

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

No data available.

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
106-42-3	p-xylene						
	Acute fish toxicity	LC50	8,4 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	ECHA Dossier	
	Acute algae toxicity	ErC50	4,9 mg/l	72 h	Pseudokirchneriella subcapitata	ECHA Dossier	
	Crustacea toxicity	NOEC	1,57 mg/l	21 d	Daphnia magna	ECHA Dossier	
108-88-3	toluene						
	Acute fish toxicity	LC50	(5,5) mg/l	96 h	Oncorhynchus kisutch	REACH Dossier	
	Acute crustacea toxicity	EC50	(3,78) mg/l	48 h	Ceriodaphnia dubia	REACH Dossier	

	Acute bacteria toxicity	EC50 ( )	134 mg/l	3 h	Chlorella vulgaris and Chlamydomonas angulosa	REACH Dossier	
142-82-5	heptane; n-heptane						
	Acute algae toxicity	ErC50	4,338 mg/l	72 h	Pseudokirchneriella subcapitata	ECHA Dossier	QSAR
	Acute crustacea toxicity	EC50	1,5 mg/l	48 h	Daphnia magna	ECHA Dossier	
	Fish toxicity	NOEC	1,284 mg/l	28 d	Oncorhynchus mykiss	ECHA Dossier	QSAR
	Crustacea toxicity	NOEC	0,17 mg/l	21 d	Daphnia magna	SIDS Initial Assessment Report For SIAM	OECD Guideline 211
64-17-5	ethanol; ethyl alcohol						
	Acute fish toxicity	LC50	15400 mg/l	96 h	Lepomis macrochirus	REACH Dossier	EPA-660/3-75-009, 1975
	Acute algae toxicity	ErC50	ca. 22000 mg/l	96 h	Raphidocelis subcapitata	REACH Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50	> 10000 mg/l	48 h	Daphnia magna	REACH Dossier	DIN 38412 part 11
	Fish toxicity	NOEC	> 79 mg/l	100 d	Oryzias latipes	REACH Dossier	
	Algae toxicity	NOEC	5400 mg/l	5 d	Skeletonema costatum	REACH Dossier	
	Crustacea toxicity	NOEC	2 mg/l	10 d	Ceriodaphnia dubia	REACH Dossier	

12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
142-82-5	heptane; n-heptane			
	-	70%	10	ECHA Dossier
	Readily biodegradable (according to OECD criteria).			
109-66-0	pentane			
	OECD 301F / ISO 9408 / EEC 92/69 annex V, C.4-D	87%	28	REACH Dossier
	Readily biodegradable (according to OECD criteria).			
64-17-5	ethanol; ethyl alcohol			
	other method (BOD method 1971)	84 %	20	REACH Dossier
	Readily biodegradable			

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
106-42-3	p-xylene	3,15
108-88-3	toluene	2,73
142-82-5	heptane; n-heptane	4,5
109-66-0	pentane	3,45
64-17-5	ethanol; ethyl alcohol	-0,77

BCF

CAS No	Chemical name	BCF	Species	Source
142-82-5	heptane; n-heptane	552	calculated	ECHA Dossier
109-66-0	pentane	171	Pimephales promelas	QSAR

64-17-5	ethanol; ethyl alcohol	1	Cyprinus carpio	REACH Dossier

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.
The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

12.7. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.
Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (2,2,4-trimethylpentane; toluene)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Classification code:	F1
Special Provisions:	274 601 640C
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (2,2,4-trimethylpentane; toluene)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Classification code:	F1
Special Provisions:	274 601 640C
Limited quantity:	1 L
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number or ID number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (2,2,4-trimethylpentane; toluene)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Marine pollutant:	YES
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (2,2,4-trimethylpentane; toluene)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Special Provisions:	A3
Limited quantity Passenger:	1 L
Passenger LQ:	Y341
Excepted quantity:	E2
IATA-packing instructions - Passenger:	353
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

Danger releasing substance: 2,2,4-trimethylpentane; heptane; n-heptane

14.6. Special precautions for user

See section 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant.

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 40, Entry 48

Directive 2010/75/EU on industrial emissions:	not determined
Directive 2004/42/EC on VOC in paints and varnishes:	not determined
Information according to Directive 2012/18/EU (SEVESO III):	E1 Hazardous to the Aquatic Environment
Additional information:	P5c

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII, No (mixture): 3, 40, 48

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Water hazard class (D):	3 - highly hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
ethanol; ethyl alcohol

SECTION 16: Other information

Changes

Rev. 1,00; 25.11.2015, Initial release
Rev. 2,00; 26.07.2018, Changes in section: 1 - 16.
Rev. 3,00; 08.01.2025, Changes in section: 2 - 16.

Abbreviations and acronyms

Flam. Liq: Flammable liquid
Acute Tox: Acute toxicity
Asp. Tox: Aspiration hazard
Skin Irrit: Skin irritation
Eye Irrit: Eye irritation
Repr: Reproductive toxicity
STOT SE: Specific target organ toxicity - single exposure
STOT RE: Specific target organ toxicity - repeated exposure
Aquatic Acute: Acute aquatic hazard
Aquatic Chronic: Chronic aquatic hazard
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS: Chemical Abstracts Service
CLP: Classification, Labelling and Packaging of substances and mixtures
DNEL: Derived No Effect Level
d: day(s)
EINECS: European INventory of Existing Commercial chemical Substances
ELINCS: European LIst of Notified Chemical Substances
ECHA: European Chemicals Agency
EWC: European Waste Catalogue
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
h: hour
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect concentration
NLP: No-Longer Polymers
N/A: not applicable
OECD: Organisation for Economic Co-operation and Development
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
REACH: Registration, Evaluation, Authorisation of Chemicals
SVHC: substance of very high concern
TRGS: Technische Regeln für Gefahrstoffe
UN: United Nations
VOC: Volatile Organic Compounds
WGK: Water Hazard Class (Germany)

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

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Acute Tox. 4; H332	Calculation method
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Calculation method
Repr. 2; H361d	Calculation method
STOT SE 3; H336	Calculation method
STOT RE 2; H373	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

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.)