

Pantera Product GmbH	Revision nr. 1.0
	Revision date 18/02/2026
Pantera Primer	Version: 02. Supersedes version: 01.
	EN - English

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

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

1.1 Product identifier



Code	SDS0094
Product name	Pantera Primer

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

Intended use	Primer
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1.3 Details of the supplier of the safety data sheet

Company name	Pantera Product GmbH
Address	Simon-Bolivar-Straße 29
Town	28197 Bremen
Country	Deutschland
Phone number	+49 (0)421 520 80 780
E-mail address	info@panteraproduct.de

1.4 Emergency telephone number

For urgent inquiries refer to	+43 (0) 1 406 43 43 (24h) +49 (0) 551-19240 GIZ-Nord
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2 Hazards identification

2.1 Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification		
Flammable liquid, category 2	H225	Highly flammable liquid and vapour.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Skin irritation, category 2	H315	Causes skin irritation.
Eye irritation, category 2	H319	Causes serious eye irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Reproductive toxicity, category 2	H361d	Suspected of damaging the unborn child.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Section 2

Hazard pictograms



Signal word

Danger

Hazard statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P501	Dispose of contents and container in accordance with local and national regulations.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P405	Store locked up.
P312	Call a poison center/doctor if you feel unwell.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe spray, vapours.
P301+P310	IF SWALLOWED: Immediately call a poison center/doctor.
P331	Do NOT induce vomiting.
P201	Obtain special instructions before use.

Supplementary hazard statements

EUH208	Contains Methyl methacrylate and n-Butyl methacrylate. May produce an allergic reaction.
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Contains

Ethyl acetate
Toluene
Propan-2-ol

2.3 Other hazards

Contact with moisture liberates Methanol.

On the basis of available data, the product does not contain any PBT or vPvB in percentage $\geq 0,1\%$.

The product does not contain substances with endocrine disrupting properties in concentration $\geq 0.1\%$.

3 Composition/information on ingredients

3.2 Mixtures

Ethyl acetate

Concentration	$30 \leq x < 50 \%$
CAS number	141-78-6

Section 3

EC number	205-500-4
INDEX number	607-022-00-5
Hazard classification	<ul style="list-style-type: none"> ▪ Flam. Liq. 2; H225 ▪ Eye Irrit. 2; H319 ▪ STOT SE 3; H336
Additional classification	EUH066

Toluene

Concentration	$20 \leq x < 40$ %
CAS number	108-88-3
EC number	203-625-9
INDEX number	601-021-00-3
Hazard classification	<ul style="list-style-type: none"> ▪ Flam. Liq. 2; H225 ▪ Asp. Tox. 1; H304 ▪ Skin Irrit. 2; H315 ▪ STOT SE 3; H336 ▪ Repr. 2; H361d ▪ STOT RE 2; H373

Propan-2-ol

Concentration	$20 \leq x < 40$ %
CAS number	67-63-0
EC number	200-661-7
INDEX number	603-117-00-0
Registration Number	01-2119457558-25-XXXX
Hazard classification	<ul style="list-style-type: none"> ▪ Flam. Liq. 2; H225 ▪ Eye Irrit. 2; H319 ▪ STOT SE 3; H336

1-Butanol

Concentration	$1 \leq x < 3$ %
CAS number	71-36-3
EC number	200-751-6
INDEX number	603-004-00-6
Hazard classification	<ul style="list-style-type: none"> ▪ Flam. Liq. 3; H226 ▪ Acute Tox. 4; H302 ▪ Skin Irrit. 2; H315 ▪ Eye Dam. 1; H318 ▪ STOT SE 3; H335 ▪ STOT SE 3; H336

Methyl methacrylate

Concentration	$0.1 \leq x < 1$ %
CAS number	80-62-6
EC number	201-297-1
INDEX number	607-035-00-6
Hazard classification	<ul style="list-style-type: none"> ▪ Flam. Liq. 2; H225 ▪ Skin Irrit. 2; H315 ▪ Skin Sens. 1; H317 ▪ STOT SE 3; H335

n-Butyl methacrylate

Concentration	$0.1 \leq x < 0.1$ %
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Section 3

CAS number	97-88-1
EC number	202-615-1
INDEX number	607-033-00-5
Hazard classification	<ul style="list-style-type: none">▪ Flam. Liq. 3; H226▪ Skin Irrit. 2; H315▪ Skin Sens. 1; H317▪ Eye Irrit. 2; H319▪ STOT SE 3; H335

The full wording of hazard (H) phrases is given in section 16 of the sheet.

4 First aid measures

4.1 Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

Headache.

Irritant effects.

Allergic reactions.

If swallowed or in the event of vomiting, risk of product entering the lungs.

DELAYED EFFECTS: Poisoning symptoms can appear even hours after exposure: it is therefore appropriate to keep the injured person under observation in the hours following the accident.

4.3 Indication of any immediate medical attention and special treatment needed

If swallowed or in the event of vomiting, risk of product entering the lungs.

Call a poison center/doctor if you feel unwell.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: foam, carbon dioxide, dry powder. Extinguishing media that must not be used: full water jet.

5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released:

Carbon monoxide (CO),

not combusted hydrocarbons.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

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Section 4

5.3 Advice for firefighters

Use self-contained breathing apparatus.
 Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.
 Cool containers at risk with water spray jet.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
 Ensure adequate ventilation.
 Use personal protective equipment (protective gloves, safety glasses, protective clothing).

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
 Do not discharge into the drains/surface waters/groundwater.
 In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. oil binder).
 Dispose of absorbed material in accordance with the regulations.

6.4 Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

7 Handling and storage

7.1 Precautions for safe handling

Use solvent-resistant equipment. Provide good room ventilation even at ground level (vapours are heavier than air). Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges. Ignitable mixtures can be formed in the empty container. Vapours can form an explosive mixture with air. Connect equipment to earth. Use explosion-proofed equipment/fittings and non-sparking tools. Do not eat, drink, smoke or take drugs at work. Take off contaminated clothing and wash before reuse. Wash hands before breaks and after work. Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.
 Keep only in original container.
 Prevent penetration into the ground.
 Provide floor with bunding.
 Do not store together with oxidizing agents.
 Keep container tightly closed.
 Keep container in a well-ventilated place.
 Protect from heat/overheating.

7.3 Specific end use(s)

Information not available.

Section 6

8 Exposure controls/personal protection

Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (**EU**): Substance / EC LIMIT VALUES **Methanol** CAS: 67-56-1, EINECS/ELINCS: 200-659-6, EU-INDEX: 603-001-00-X Eight hours: 200 ppm, 260 mg/m³

Ingredients with occupational exposure limits to be monitored (**GB**): Substance **Methanol** CAS: 67-56-1, EINECS/ELINCS: 200-659-6, EU-INDEX: 603-001-00-X, Reg-No.: 01-2119433307-44-XXXX, Long-term exposure: 200 ppm, 266 mg/m³, Sk, Short-term exposure (15-minute): 250 ppm, 333 mg/m³

Regulatory references

European Union-OEL	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
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Ethyl acetate

	TWA		STEL		CEILING		Remarks
	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	
European Union-OEL	734	200	1,468	400			--
GB	730	200	1,460	400			

Predicted no-effect concentration - PNEC

Normal value of STP microorganisms	650 mg/l
Normal value in fresh water	240 µg/l
Normal value for fresh water sediment	1.15 mg/kg
Normal value in marine water	1.65 mg/l
Normal value for marine water sediment	115 µg/kg
Normal value for the terrestrial compartment	148 µg/kg
Normal value for the atmosphere	200 mg/kg
Normal value for fresh water, intermittent release	24 µg/l

Health - Derived no-effect level - DNEL / DMEL

	Local effect	Systemic effect
Consumers, long-term, dermal	Low hazard	37 mg/kg
Consumers, long-term, inhalation	367 mg/m ³	367 mg/m ³
Consumers, long-term, oral		4.5 mg/kg
Workers, long-term, dermal	No hazard identified	63 mg/kg
Workers, long-term, inhalation	734 mg/m ³	734 mg/m ³

Toluene

	TWA		STEL		CEILING		Remarks
	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	
European Union-OEL	192	50	384	100			Skin
GB	191	50	384	100			Skin

Predicted no-effect concentration - PNEC

Normal value of STP microorganisms	13.61 mg/l
Normal value in fresh water	0.68 mg/l
Normal value for fresh water sediment	16.39 mg/kg
Normal value in marine water	0.68 mg/l

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Predicted no-effect concentration - PNEC	
Normal value for marine water sediment	2.89 mg/kg
Normal value for water, intermittent release	0.68 mg/l

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, short-term, inhalation		226 mg/m ³
Consumers, long-term, dermal	No hazard identified	226 mg/kg
Consumers, long-term, inhalation	56.5 mg/m ³	56.5 mg/m ³
Consumers, long-term, oral		8.13 mg/kg
Workers, short-term, inhalation	384 mg/m ³	384 mg/m ³
Workers, long-term, dermal	No hazard identified	384 mg/kg
Workers, long-term, inhalation	192 mg/m ³	192 mg/m ³

Methyl methacrylate

	TWA		STEL		CEILING		Remarks
	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	
European Union-OEL		50		100			--
GB	208	50	416	100			--

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	10 mg/l
Normal value in fresh water	0.94 mg/l
Normal value for fresh water sediment	10.2 mg/kg
Normal value in marine water	0.094 mg/l
Normal value for marine water sediment	0.102 mg/kg

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, short-term, dermal	1.5 mg/cm ²	
Consumers, short-term, inhalation	208 mg/m ³	
Consumers, long-term, dermal	1.5 mg/cm ²	8.2 mg/kg bw/d
Consumers, long-term, inhalation	104 mg/m ³	74.3 mg/m ³
Consumers, long-term, oral		8.2 mg/kg bw/d
Workers, short-term, dermal	1.5 mg/cm ²	
Workers, short-term, inhalation	416 mg/m ³	
Workers, long-term, dermal	1.5 mg/cm ²	13.67 mg/kg bw/d
Workers, long-term, inhalation	208 mg/m ³	348.4 mg/m ³

1-Butanol

	TWA		STEL		CEILING		Remarks
	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	
ACGIH	61	20					--
GB		50					--

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	2.476 g/l
Normal value in fresh water	82 µg/l
Normal value for fresh water sediment	178 µg/kg
Normal value in marine water	0.0082 mg/l
Normal value for marine water sediment	17.8 µg/kg
Normal value for the terrestrial compartment	15 µg/kg

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Predicted no-effect concentration - PNEC	
Normal value for the food chain (secondary poisoning)	No hazard identified
Normal value for water, intermittent release	2.25 mg/l

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, long-term, dermal	Low hazard	3.125 mg/kg
Consumers, long-term, inhalation	155 mg/m ³	55.357 mg/m ³
Consumers, long-term, oral		1.562 mg/kg
Workers, long-term, inhalation	310 mg/m ³	Low hazard

Propan-2-ol

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	2,251 mg/l
Normal value in fresh water	140.9 mg/l
Normal value for fresh water sediment	552 mg/kg/d
Normal value in marine water	140.9 mg/l
Normal value for the terrestrial compartment	28 mg/kg
Normal value for the food chain (secondary poisoning)	160 mg/kg

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, long-term, dermal		319 mg/kg bw/d
Consumers, long-term, inhalation		89 mg/m ³
Consumers, long-term, oral		26 mg/kg bw/d
Workers, long-term, dermal		888 mg/kg bw/d
Workers, long-term, inhalation		500 mg/m ³

n-Butyl methacrylate

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	31.7 mg/l
Normal value in fresh water	16.9 µg/l
Normal value for fresh water sediment	4.73 mg/kg
Normal value in marine water	56 µg/l
Normal value for marine water sediment	473 µg/kg
Normal value for the terrestrial compartment	935 µg/kg
Normal value for fresh water, intermittent release	1.69 µg/l

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, long-term, dermal		3 mg/kg
Consumers, long-term, inhalation	366.4 mg/m ³	66.5 mg/m ³
Workers, long-term, dermal		5 mg/kg
Workers, long-term, inhalation	409 mg/m ³	415.9 mg/m ³

8.2 Exposure controls

Avoid contact with eyes and skin. Do not inhale vapours. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

Section 6

Protect your hands with gloves of the following type

Material	Thickness	Breakthrough time
0,7 mm Viton, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.	0.7 mm	> 480 min
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Solvent-resistant protective clothing (EN 340)

Safety glasses. (EN 166:2001)

In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)

Environmental exposure controls: Protect the environment by applying appropriate control measures to prevent or limit emissions.

9 Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical state	liquid	
Colour	colourless	
Odour	characteristic	
Melting point / freezing point	Not available	
Initial boiling point	> 76 °C (> 168.8 °F)	
Flammability	Not determined	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Flash point	-4 °C (24.8 °F)	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
pH	Not available	
Kinematic viscosity (40 °C)	< 7 mm ² /s	Temperature: 40 °C (104 °F)
Solubility	Not available	
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	Not available	
Density and/or relative density	Not available	
Relative vapour density	Not available	

Particle characteristics

Information not available.

9.2 Other information**9.2.1 Information with regard to physical hazards**

Information not available.

9.2.2 Other safety characteristics

VOC (Directive 2010/75/EU)	> 90%	
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Section 8

10 Stability and reactivity

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Evolution of highly flammable gases/vapours.

Uncleaned empty vessels may contain product gases which can form explosive mixtures with air.

Reactions with strong oxidizing agents.

10.4 Conditions to avoid

Strong heating. See section 7.

10.5 Incompatible materials

Not determined.

10.6 Hazardous decomposition products

Flammable gases/vapours.

11 Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

11.1.1 Metabolism, toxicokinetics, mechanism of action and other information

Information not available.

11.1.2 Information on likely routes of exposure

Toluene

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air; contact with the skin of products containing the substance.

11.1.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

Toluene

Toxic effect on the central and peripheral nervous system with encephalopathy and polyneuritis; irritating for the skin, conjunctiva, cornea and respiratory apparatus.

11.1.4 Interactive effects

Toluene

Certain drugs and other industrial products can interfere with the metabolism of the toluene.

Section 8

11.1.5 ACUTE TOXICITY

ATE (Oral) of the mixture	> 2,000 mg/kg
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Ethyl acetate

LD50 (Oral):	5,620 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	20,000 mg/kg	
LC50 (Inhalation vapours):	5.86 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

Toluene

LD50 (Oral):	5,580 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	12,124 mg/kg	Species/guidelines: Rabbit
LC50 (Inhalation vapours):	25.7 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

Methyl methacrylate

LD50 (Oral):	> 5,000 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	> 5,000 mg/kg	
LC50 (Inhalation vapours):	29.8 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

1-Butanol

LD50 (Oral):	2,290 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	3,434 mg/kg	Species/guidelines: Rabbit
LC50 (Inhalation vapours):	> 17.76 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

Propan-2-ol

LD50 (Oral):	4,570 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	12,800 mg/kg	Species/guidelines: Rat
LC50 (Inhalation vapours):	30 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

n-Butyl methacrylate

LD50 (Oral):	> 2,000 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	> 2,000 mg/kg	Species/guidelines: Rat

11.1.6 SKIN CORROSION/IRRITATION

Causes skin irritation.

Toluene

dermal, Rabbit, OECD 404, irritant

Methyl methacrylate

dermal, irritant

1-Butanol

dermal, Rabbit, irritant

11.1.7 SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation.

Ethyl acetate

Eye, Rabbit, In vivo study, Slight irritant effect - does not require labelling.

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Toluene

Eye, Rabbit, non-irritating

1-Butanol

Eye, Rabbit, OECD 405, corrosive

Propan-2-ol

Eye irritation (OECD test guideline 405). Splashes in the eyes can cause severe pain. Vapor is irritating.

11.1.8 RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Ethyl acetate

Guinea pig, OECD 406, non-sensitizing

Methyl methacrylate

inhalative, no adverse effect observed; dermal, sensitising

1-Butanol

dermal, Mouse (female), OECD 429, non-sensitizing

11.1.9 GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

11.1.10 CARCINOGENICITY

Does not meet the classification criteria for this hazard class

11.1.11 REPRODUCTIVE TOXICITY

Suspected of damaging the unborn child.

Adverse effects on sexual function and fertility**Ethyl acetate**

NOAEL, oral, mouse, 26400 mg/kg bw/day, In vivo study, negativ.

NOAEC, inhalative, Rat, 22 000 mg/m³, In vivo study, negativ.

Toluene

inhalative, Rat, Study, positive

1-Butanol

NOAEL, oral, Rat, 1454 mg/kg bw/day, OECD 414, adverse effect observed.

NOAEL, oral, Rat, 500 mg/kg bw/day, no adverse effect observed.

NOAEC, inhalative, Rat, 6189 mg/m³, no adverse effect observed.

Adverse effects on development of the offspring**Ethyl acetate**

NOAEL, oral, mouse, 26400 mg/kg bw/day, In vivo study, negativ.

NOAEC, inhalative, Rat, 22 000 mg/m³, In vivo study, negativ.

Toluene

inhalative, Rat, Study, positive

1-Butanol

NOAEL, oral, Rat, 1454 mg/kg bw/day, OECD 414, adverse effect observed

NOAEL, oral, Rat, 500 mg/kg bw/day, no adverse effect observed

NOAEC, inhalative, Rat, 6189 mg/m³, no adverse effect observed

Section 8

11.1.12 STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness.

Toluene

Positive. Vapours can have a narcotic effect.

Methyl methacrylate

inhalative, irritant

1-Butanol

Vapors may have a narcotic effect. Irritates the respiratory system.

11.1.13 STOT - REPEATED EXPOSURE

May cause damage to organs through prolonged or repeated exposure.

Ethyl acetate

NOAEL, oral, Rat, 900 mg/kg bw/day, Study, negativ.

NOAEC, inhalative, Rat, 1.28 mg/L, Study, negativ.

Toluene

Positive. May cause damage to organs through prolonged or repeated exposure through inhalation.

11.1.14 ASPIRATION HAZARD

May be fatal if swallowed and enters airways.

$v < 20,5 \text{ mm}^2/\text{s}$ (40 °C)

Toxic for aspiration

Toluene

This product may pose an aspiration hazard to humans.

11.2 Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

12 Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1 Toxicity**Ethyl acetate**

EC10 for Algae / Aquatic Plants	2.3 g/l	Exposure duration: 48 hours
LC50 - for Fish	230 mg/l	Exposure duration: 96 hours
Chronic NOEC for Fish	9.65 mg/l	
Chronic NOEC for Crustacea	2.4 mg/l	
Chronic NOEC for Algae / Aquatic Plants	100 mg/l	

Toluene

EC50 - for Crustacea	3.78 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia sp.
LC50 - for Fish	5.5 mg/l	Exposure duration: 96 hours
Chronic NOEC for Fish	1.39 mg/l	
Chronic NOEC for Crustacea	740 µg/l	

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Methyl methacrylate

EC50 - for Crustacea	69 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	> 79 mg/l	Exposure duration: 96 hours Species/guidelines: Oncorhynchus mykiss
EC50 - for Algae / Aquatic Plants	> 110 mg/l	Exposure duration: 72 hours Species/guidelines: Selenastrum capricornutum
Chronic NOEC for Fish	9.4 mg/l	Species/guidelines: Danio rerio
Chronic NOEC for Crustacea	37 mg/l	Species/guidelines: Daphnia magna

1-Butanol

EC50 - for Crustacea	1.328 g/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	1.376 g/l	Exposure duration: 96 hours Species/guidelines: Leuciscus idus
Chronic NOEC for Crustacea	4.1 mg/l	

Propan-2-ol

EC50 - for Crustacea	13,299 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	9,640 mg/l	Exposure duration: 96 hours Species/guidelines: Fish

EC50/15 min 22.000 mg/l (Photobacterium phosphoreum (Leuchtbak.))

n-Butyl methacrylate

EC50 - for Crustacea	> 25.4 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	> 5.57 mg/l	Exposure duration: 96 hours Species/guidelines: Pimephales promelas
EC50 - for Algae / Aquatic Plants	31.2 mg/l	Exposure duration: 72 hours Species/guidelines: Pseudokirchneriella subcapitata
Chronic NOEC for Crustacea	> 1.1 mg/l	
Chronic NOEC for Algae / Aquatic Plants	24.8 mg/l	

12.2 Persistence and degradability

Information not available.

12.4 Mobility in soil

Information not available.

12.5 Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage $\geq 0,1\%$.

12.6 Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7 Other adverse effects

Information not available.

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Section 12

13 Disposal considerations

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

13.1 Waste treatment methods

Product: Disposal in an incineration plant in accordance with the regulations of the local authorities.
Dispose of as hazardous waste. Waste no. (recommended) 200113*.

Contaminated packaging: Packaging that cannot be cleaned should be disposed of as for product.
Uncontaminated packaging may be taken for recycling.
Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances.
150102.

14 Transport information

14.1 UN number or ID number

ADR / RID	IMDG	IATA
UN 1993	UN 1993	UN 1993

14.2 UN proper shipping name

ADR / RID	FLAMMABLE LIQUID, N.O.S. (Ethyl acetate – Toluene), F1
IMDG	FLAMMABLE LIQUID, N.O.S. (Ethyl acetate – Toluene), F-E, S-E
IATA	FLAMMABLE LIQUID, N.O.S. (Ethyl acetate – Toluene)

14.3 Transport hazard class(es)

	Class:	Label
ADR / RID	3	3 
IMDG	3	3 
IATA	3	3 

14.4 Packing group

ADR / RID	IMDG	IATA
II	II	II

14.5 Environmental hazards

ADR / RID	No	
IMDG	No	
IATA	No	

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14.6 Special precautions for user

ADR / RID			
Hazard identification No. - Kemler	33	Limited Quantities	1 L
Tunnel restriction code	(D/E)	Special provisions	274, 601, 640 C
IMDG			
EmS	F-E, <u>S</u> -E	Limited Quantities	1 L
IATA			
Maximum quantity (Cargo)	60 L	Packaging instructions (Cargo)	364
Maximum quantity (Passengers)	5 L	Packaging instructions (Passengers)	353
Special provisions	A3		

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

15 Regulatory information

EEC-REGULATIONS 2008/98/EG (2000/532/EC); 2010/75/EU; 2004/42/EG; (EG) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EWG ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 2024/573; (EU) 2019/1148; (EU) 2019/1021, (EU) 2023/707

- Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.

TRANSPORT-REGULATIONS ADR (2025); IMDG-Code (2025, 42. Amdt.); IATA-DGR (2025, 66th Edition)

NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.

- Observe employment restrictions for people: Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.

- VOC (2010/75/CE) > 90 %

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

Seveso Category - Directive 2012/18/EU:

P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

	Restrictions	Registration Number EU
Product restrictions	3, 40	
Contained substance		
	75	
Toluene	48	

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

Registration Number EU

On the basis of available data, the product does not contain any SVHC in percentage \geq than 0,1%.

Substances subject to authorisation (Annex XIV REACH)	Authorisation Number	Sunset date	Registration Number EU
None			

Section 14

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Regulation (EU) 2019/1021 - on persistent organic pollutants

None

15.2 Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

16 Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Repr. 2	Reproductive toxicity, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Legend

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level

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Legend

- EC50: Effective concentration (required to induce a 50% effect)
- EC: Identifier in ESIS (European archive of existing substances)
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile

General Bibliography

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I ATP CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II ATP CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III ATP CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV ATP CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V ATP CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI ATP CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII ATP CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII ATP CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX ATP CLP)
13. Regulation (EU) 2017/776 (X ATP CLP)
14. Regulation (EU) 2018/669 (XI ATP CLP)
15. Regulation (EU) 2019/521 (XII ATP CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII ATP CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (EU) 2020/217 (XIV ATP CLP)
19. Delegated Regulation (EU) 2020/1182 (XV ATP CLP)
20. Delegated Regulation (EU) 2021/643 (XVI ATP CLP)
21. Delegated Regulation (EU) 2021/849 (XVII ATP CLP)
22. Delegated Regulation (EU) 2022/692 (XVIII ATP CLP)
23. Delegated Regulation (EU) 2023/707
24. Delegated Regulation (EU) 2023/1434 (XIX ATP CLP)
25. Delegated Regulation (EU) 2023/1435 (XX ATP CLP)
26. Delegated Regulation (EU) 2024/197 (XXI ATP CLP)
27. Delegated Regulation (EU) 2024/2564 (XXII ATP CLP)
28. Regulation (EU) 2024/2865

Section 15

General Bibliography

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Calculation methods for classification

Chemical and physical hazards:

Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards:

Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards:

Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.