PANTERA Product GmbH
28197 Bremen / GERMANY

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

1.1 Product identifier

Pantera Primer

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

1.2.1 Relevant uses

Primer

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

PANTERA Product GmbH
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28197 Bremen / GERMANY
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Fax +49 (0)421 520 80 789
Homepage www.panteraproduct.de
E-mail info@panteraproduct.de

Address enquiries to

Technical information info@panteraproduct.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body GIZ-Nord; +49 (0)551 19 240

Company

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Flam. Liq. 2: H225 Highly flammable liquid and vapour.
Eye Irrit. 2: H319 Causes serious eye irritation.
Skin Irrit. 2: H315 Causes skin irritation.
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure.
Repr. 2: H361d Suspected of damaging the unborn child.
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.
STOT SE 3: H336 May cause drowsiness or dizziness.

2.2 Label elements

The product does not require a hazard warning label in accordance with GHS/CLP-directives.

Hazard pictograms

Signal word DANGER

Contains: Ethyl acetate

Propan-2-ol

Toluene

Hazard statements

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

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe vapours.
P280 Wear protective gloves / eye protection / face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER / doctor.
P331 Do NOT induce vomiting.
P501 Dispose of contents/container in accordance with local/national regulation.

UFI: -

Special labelling Contains: Methyl methacrylate, Butyl methacrylate. EUH208 May produce an allergic reaction.

2.3 Other hazards

Environmental hazards Does not contain any PBT or vPvB substances.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

Product-type:

3.2 The product is a mixture.

Range [%]	Substance
30 - <50	Ethyl acetate
	CAS: 141-78-6, EINECS/ELINCS: 205-500-4, EU-INDEX: 607-022-00-5, Reg-No.: 01-2119475103-46-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Eye Irrit. 2: H319 - STOT SE 3: H336
20 - <40	Toluene
	CAS: 108-88-3, EINECS/ELINCS: 203-625-9, EU-INDEX: 601-021-00-3, Reg-No.: 01-2119471310-51-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Repr. 2: H361d - Asp. Tox. 1: H304 - STOT RE 2: H373 - Skin Irrit. 2: H315 - STOT SE 3: H336
20 - <40	Propan-2-ol
	CAS: 67-63-0, EINECS/ELINCS: 200-661-7, EU-INDEX: 603-117-00-0, Reg-No.: 01-2119457558-25-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Eye Irrit. 2: H319 - STOT SE 3: H336
1 - <3	Butan-1-ol
	CAS: 71-36-3, EINECS/ELINCS: 200-751-6, EU-INDEX: 603-004-00-6, Reg-No.: 01-2119484630-38-XXXX
	GHS/CLP: Flam. Liq. 3: H226 - Acute Tox. 4: H302 - Eye Dam. 1: H318 - STOT SE 3: H336 - STOT SE 3: H335 - Skin Irrit. 2: H315
0,1 - <1	Methyl methacrylate
	CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6, Reg-No.: 01-2119452498-28-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Skin Irrit. 2: H315 - Skin Sens. 1: H317 - STOT SE 3: H335
0,1 - <1	Butyl methacrylate
	CAS: 97-88-1, EINECS/ELINCS: 202-615-1, EU-INDEX: 607-033-00-5, Reg-No.: 01-2119486934-28-XXXX
	GHS/CLP: Flam. Liq. 3: H226 - Skin Irrit. 2: H315 - Skin Sens. 1: H317 - Eye Irrit. 2: H319 - STOT SE 3: H335

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Remove contaminated soaked clothing immediately and dispose of safely.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion Consult a doctor immediately.
Do not induce vomiting.

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.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam.
Dry powder.
Carbon dioxide.

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.

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.
Cool containers at risk with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventilation.
High risk of slipping due to leakage/spillage of product.

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.

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide good room ventilation even at ground level (vapours are heavier than air).

Keep away from all sources of ignition - Refrain from smoking.
Ignitable mixtures can be formed in the empty container.
Take precautionary measures against static discharges.
Vapours can form an explosive mixture with air.
Apparates and equipments must be conform in accordance to standard of storage and handling of flammable products.
Connect equipment to earth.

Do not eat, drink, smoke or take drugs at work.
Remove soiled or soaked clothing immediately.
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 in a well-ventilated place.
Keep container tightly closed.
Protect from heat/overheating.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Ethyl acetate
CAS: 141-78-6, EINECS/ELINCS: 205-500-4, EU-INDEX: 607-022-00-5, Reg-No.: 01-2119475103-46-XXXX
Long-term exposure: 200 ppm, 730 mg/m³
Short-term exposure (15-minute): 400 ppm, 1460 mg/m³
Propan-2-ol
CAS: 67-63-0, EINECS/ELINCS: 200-661-7, EU-INDEX: 603-117-00-0, Reg-No.: 01-2119457558-25-XXXX
Long-term exposure: 400 ppm, 999 mg/m³
Short-term exposure (15-minute): 500 ppm, 1250 mg/m³
Toluene
CAS: 108-88-3, EINECS/ELINCS: 203-625-9, EU-INDEX: 601-021-00-3, Reg-No.: 01-2119471310-51-XXXX
Long-term exposure: 50 ppm, 191 mg/m³, Sk
Short-term exposure (15-minute): 100 ppm, 384 mg/m³
Butan-1-ol
CAS: 71-36-3, EINECS/ELINCS: 200-751-6, EU-INDEX: 603-004-00-6, Reg-No.: 01-2119484630-38-XXXX
Long-term exposure: 50 ppm, Sk
Short-term exposure (15-minute): 50 ppm, 154 mg/m³
Methyl methacrylate
CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6, Reg-No.: 01-2119452498-28-XXXX
Long-term exposure: 50 ppm, 208 mg/m³
Short-term exposure (15-minute): 100 ppm, 416 mg/m³
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

Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES
Ethyl acetate
CAS: 141-78-6, EINECS/ELINCS: 205-500-4, EU-INDEX: 607-022-00-5, Reg-No.: 01-2119475103-46-XXXX
Eight hours: 200 ppm, 734 mg/m³
Short-term (15-minute): 400 ppm, 1468 mg/m³
Toluene
CAS: 108-88-3, EINECS/ELINCS: 203-625-9, EU-INDEX: 601-021-00-3, Reg-No.: 01-2119471310-51-XXXX
Eight hours: 50 ppm, 192 mg/m³, H
Short-term (15-minute): 100 ppm, 384 mg/m³
Methyl methacrylate
CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6, Reg-No.: 01-2119452498-28-XXXX
Eight hours: 50 ppm
Short-term (15-minute): 100 ppm
Methanol
CAS: 67-56-1, EINECS/ELINCS: 200-659-6, EU-INDEX: 603-001-00-X, Reg-No.: 01-2119433307-44-XXXX
Eight hours: 200 ppm, 260 mg/m³, H

DNEL

Substance
Methyl methacrylate, CAS: 80-62-6
Industrial, dermal, Long-term - local effects: 1,5 mg/cm².
Industrial, inhalative, Long-term - local effects: 208 mg/m³.
Industrial, inhalative, Long-term - systemic effects: 208 mg/m³.
Industrial, dermal, Long-term - systemic effects: 13,67 mg/kg bw/d.
Industrial, dermal, Acute - local effects: 1,5 mg/cm².
general population, inhalative, Long-term - systemic effects: 74,3 mg/m³.
general population, dermal, Acute - local effects: 1,5 mg/cm².
general population, dermal, Long-term - local effects: 1,5 mg/cm².
general population, dermal, Long-term - systemic effects: 8,2 mg/kg bw/d.
general population, inhalative, Long-term - local effects: 104 mg/m³.
Toluene, CAS: 108-88-3
Industrial, dermal, Long-term - systemic effects: 384 mg/kg bw/day.
Industrial, inhalative (vapor), Acute - local effects: 384 mg/m³.
Industrial, inhalative (vapor), Long-term - systemic effects: 192 mg/m³.
general population, dermal, Long-term - systemic effects: 226 mg/kg bw/day.
general population, oral, Long-term - systemic effects: 8,13 mg/kg bw/day.
general population, inhalative (vapor), Acute - local effects: 226 mg/m³.
Butan-1-ol, CAS: 71-36-3
Industrial, inhalative, Long-term - local effects: 310 mg/m³.
Ethyl acetate, CAS: 141-78-6
Industrial, inhalative (vapor), Long-term - systemic effects: 734 mg/m³.
Industrial, inhalative (vapor), Long-term - local effects: 734 mg/m³.
Industrial, inhalative (vapor), Acute - systemic effects: 1468 mg/m³.
Industrial, inhalative (vapor), Acute - local effects: 1468 mg/m³.
Industrial, dermal, Long-term - systemic effects: 63 mg/kg bw/d.
general population, inhalative (vapor), Acute - local effects: 734 mg/m³.
general population, dermal, Long-term - systemic effects: 37 mg/kg bw/d.
general population, oral, Long-term - systemic effects: 4,5 mg/kg bw/d.
general population, inhalative (vapor), Long-term - systemic effects: 367 mg/m³.
general population, inhalative (vapor), Long-term - local effects: 367 mg/m³.
general population, inhalative (vapor), Acute - systemic effects: 734 mg/m³.
Propan-2-ol, CAS: 67-63-0
Industrial, dermal, Long-term - systemic effects: 888 mg/kg.
Industrial, inhalative, Long-term - systemic effects: 500 mg/m³.
general population, oral, Long-term - systemic effects: 26 mg/kg.
general population, inhalative, Long-term - systemic effects: 89 mg/m³.
general population, dermal, Long-term - systemic effects: 319 mg/kg.
Butyl methacrylate, CAS: 97-88-1
Industrial, inhalative, Long-term - systemic effects: 415,9 mg/m³.
Industrial, dermal, Long-term - systemic effects: 5 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 3 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 66,5 mg/m³.

PNEC

Substance
Methyl methacrylate, CAS: 80-62-6
sediment (freshwater), 5,74 mg/kg dw.
freshwater, 0,94 mg/l.
sewage treatment plants (STP), 10 mg/l.

soil, 1,47 mg/kg dw.
seawater, 0,94 mg/l.
Toluene, CAS: 108-88-3
freshwater, 0,68 mg/l.
sediment (seawater), 16,39 mg/kg.
sediment (freshwater), 16,39 mg/kg.
seawater, 0,68 mg/l.
sewage treatment plants (STP), 13,61 mg/l.
soil, 2,89 mg/kg.
Butan-1-ol, CAS: 71-36-3
sewage treatment plants (STP), 2476 mg/l.
seawater, 0,0082 mg/l.
sediment (freshwater), 0,324 mg/kg.
sediment (seawater), 0,032 mg/kg.
soil, 0,017 mg/kg.
freshwater, 0,082 mg/l.
Ethyl acetate, CAS: 141-78-6
sewage treatment plants (STP), 650 mg/L.
freshwater, 0,24 mg/L.
seawater, 0,024 mg/L.
sediment (freshwater), 1,15 mg/kg sediment dw.
oral (food), 0,2 g/kg food.
sediment (seawater), 0,115 mg/kg sediment dw.
soil, 0,148 mg/kg soil dw.
Propan-2-ol, CAS: 67-63-0
freshwater, 140,9 mg/l.
seawater, 140,9 mg/l.
sediment (freshwater), 552 mg/kg.
sediment (seawater), 552 mg/kg.
soil, 28 mg/kg.
sewage treatment plants (STP), 2251 mg/l.
Butyl methacrylate, CAS: 97-88-1
sewage treatment plants (STP), 31,7 mg/l.
sediment (seawater), 0,473 mg/kg.
sediment (freshwater), 4,73 mg/kg.
freshwater, 0,0169 mg/l.
seawater, 0,00169 mg/l.
soil, 0,935 mg/kg.

8.2 Exposure controls

Additional advice on system design	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.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	0,7 mm Viton, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	Solvent-resistant protective clothing (EN 340)
Other	Avoid contact with eyes and skin. Do not inhale gases/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. It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Multi-purpose filter ABEK. (DIN EN 14387)
Thermal hazards	no
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Color	colourless
Odor	characteristic
Odour threshold	not applicable
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	> 76
Flash point [°C]	- 4
Flammability (solid, gas) [°C]	not determined
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	partially miscible
Partition coefficient [n-octanol/water]	not determined
Viscosity	< 7 mm²/s (40 °C)
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not applicable
Decomposition temperature [°C]	not determined

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

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

See SECTION 7
Strong heating.

10.5 Incompatible materials

not determined

10.6 Hazardous decomposition products

Flammable gases/vapours.
Contact with moisture liberates Methanol.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product
ATE-mix, oral, Rat: > 5000 mg/kg.

Substance
Methyl methacrylate, CAS: 80-62-6
LD50, dermal, Rabbit: > 5000 mg/kg.
LD50, oral, Rat: > 5000 mg/kg (OECD 401).
LC50, inhalative, Rat: 29,8 mg/l.
Toluene, CAS: 108-88-3
LD50, oral, Rat: > 5000 mg/kg.
LD50, dermal, Rabbit: > 5000 mg/kg.
Butan-1-ol, CAS: 71-36-3
LD50, dermal, Rabbit: 3400 mg/kg.
LD50, oral, Rat: 790 mg/kg.
LC50, inhalative, Rat: > 17,76 mg/l (4 h).
Ethyl acetate, CAS: 141-78-6
LD50, dermal, mouse: 18000 mg/kg.
LD50, oral, Rat: 5600 mg/kg.
LC50, inhalative, Rat: 58 mg/l (8 h).
Propan-2-ol, CAS: 67-63-0
LD50, oral, Rat: 5840 mg/kg bw.
LD50, dermal, Rabbit: 16,4 mL/kg bw.
LC50, inhalative, Rat: 10000 ppm (4h).
Butyl methacrylate, CAS: 97-88-1
LD50, dermal, Rabbit: > 2000 mg/kg.
LD50, oral, Rat: > 2000 mg/kg.

Serious eye damage/irritation
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Irritant
Calculation method

Skin corrosion/irritation
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Irritant
Calculation method

Respiratory or skin sensitisation
Based on available data, the classification criteria are not met.
Toxicological data of complete product are not available.
Calculation method

Specific target organ toxicity — single exposure
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Vapours may cause drowsiness and dizziness.
Calculation method

Specific target organ toxicity — repeated exposure
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
May cause damage to organs through prolonged or repeated exposure through inhalation.

Mutagenicity
Does not contain a relevant substance that meets the classification criteria.

Reproduction toxicity
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Suspected of damaging the unborn child.
Calculation method

Carcinogenicity
Does not contain a relevant substance that meets the classification criteria.

Aspiration hazard

Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
v < 20,5 mm²/s (40 °C)
May be fatal if swallowed and enters airways.

General remarks

The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 12: Ecological information

12.1 Toxicity

Substance
Methyl methacrylate, CAS: 80-62-6
LC50, (96h), Oncorhynchus mykiss: > 79 mg/l (OECD 203).
EC50, (48h), Daphnia magna: 69 mg/l (OECD 202).
EC50, (72h), Selenastrum capricornutum: > 110 mg/l (OECD 201).
NOEC, Danio rerio: 9,4 mg/l (OECD 210).
NOEC, (21d), Daphnia magna: 37 mg/l (OECD 202-2).
Butan-1-ol, CAS: 71-36-3
LC50, (96h), Scenedesmus subspicatus: > 500 mg/l.
LC50, (96h), Leuciscus idus: 1200 mg/l.
LC50, (96h), Pimephales promelas: 1376 mg/l.
EC50, (72h), Desmodesmus subspicatus: > 500 mg/l.
EC50, (48h), Daphnia magna: 1328 mg/l.
EC50, Pseudomonas putida: 4400 mg/l (17 h).
Ethyl acetate, CAS: 141-78-6
LC50, (96h), Pimephales promelas: 230 mg/l.
EC50, (48h), Desmodesmus subspicatus: 3300 mg/l.
EC50, (48h), Daphnia magna: 717 mg/l (DIN 38412).
EC10, (16h), Pseudomonas putida: 2900 mg/l.
Propan-2-ol, CAS: 67-63-0
LC50, (96h), Pimephales promelas: 9640 mg/L (IUCLID).
EC50, (48h), Daphnia magna: 13299 mg/L (IUCLID).
EC50, (72h), Scenedesmus subspicatus: >1000 mg/L (IUCLID).
Butyl methacrylate, CAS: 97-88-1
LC50, (96h), Pimephales promelas: 11 mg/l.
EC50, (48h), Daphnia magna: 32 mg/l.
EC50, (96h), Pseudokirchneriella subcapitata: 57 mg/l.

12.2 Persistence and degradability

Behaviour in environment compartments not determined

Behaviour in sewage plant not determined

Biological degradability not determined

12.3 Bioaccumulative potential

not determined

12.4 Mobility in soil

not determined

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

Ecological data of complete product are not available.
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material c 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.

Product

Dispose of as hazardous waste.
Disposal in an incineration plant in accordance with the regulations of the local authorities.

Waste no. (recommended) 200113*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110*
150102

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID	1993
Inland navigation (ADN)	1993
Marine transport in accordance with IMDG	1993
Air transport in accordance with IATA	1993

14.2 UN proper shipping name

Transport by land according to ADR/RID	Flammable liquid, n.o.s. (Toluene, Ethyl acetate)
- Classification Code	F1
- Label	
- ADR LQ	1 l
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 2 (D/E)
Inland navigation (ADN)	Flammable liquid, n.o.s. (Toluene, Ethyl acetate)
- Classification Code	F1
- Label	
Marine transport in accordance with IMDG	Flammable liquid, n.o.s. (Toluene, Ethyl acetate)
- EMS	F-E, S-E
- Label	
- IMDG LQ	1 l
Air transport in accordance with IATA	Flammable liquid, n.o.s. (Toluene, Ethyl acetate)
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	3
Inland navigation (ADN)	3
Marine transport in accordance with IMDG	3
Air transport in accordance with IATA	3

14.4 Packing group

Transport by land according to ADR/RID	II
Inland navigation (ADN)	II
Marine transport in accordance with IMDG	II
Air transport in accordance with IATA	II

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not determined

SECTION 15: Regulatory information

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

EEC-REGULATIONS	1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- 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 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 03)

H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H318 Causes serious eye damage.
H302 Harmful if swallowed.
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H373 May cause damage to organs through prolonged or repeated exposure through inhalation.
H304 May be fatal if swallowed and enters airways.
H361d Suspected of damaging the unborn child.
H336 May cause drowsiness or dizziness.
H319 Causes serious eye irritation.
H225 Highly flammable liquid and vapour.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Flam. Liq. 2: H225 Highly flammable liquid and vapour. (On basis of test data)
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure. (Calculation method)
Repr. 2: H361d Suspected of damaging the unborn child. (Calculation method)
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways. (On basis of test data)
STOT SE 3: H336 May cause drowsiness or dizziness. (Calculation method)

Modified position

SECTION 2 been added: Further hazards were not determined with the current level of knowledge.

SECTION 8 been added: In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.

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