

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : PROTECH FLEX
Revision date : 19.07.2017
Print date : 06.08.2017

Version (Revision) : 2.0.0 (1.0.0)

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

1.1 Product identifier

PROTECH FLEX

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

Preparation for building and construction: Single-component polyurethane sealant, solvent-free, PVC and halogenated compounds, medium / high elastic modulus.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

AZICHEM Srl

Street : Via G. Gentile16/A

Postal code/city : 46044 Goito (MN)

Telephone : +390376604185/604365

Telefax : +39 0376 604398

Information contact : info@azichem.com

1.4 Emergency telephone number

Centro Antiveleni di Milano +39 02 66101029 (CAV Ospedale Niguarda Ca' Granda -Milano) (24h)

Centro Antiveleni di Pavia +39 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia)

Centro Antiveleni di Bergamo +39 800 883300 (CAV Ospedali Riuniti - Bergamo)

Centro Antiveleni di Firenze +39 055 7947819 (CAV Ospedale Careggi - Firenze)

Centro Antiveleni di Roma +39 06 3054343 (CAV Policlinico Gemelli - Roma)

Centro Antiveleni di Roma +39 06 49978000 (CAV Policlinico Umberto I - Roma)

Centro Antiveleni di Napoli +39 081 7472870 (CAV Ospedale Cardarelli - Napoli)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Resp. Sens. 1 ; H334 - Sensitisation to the respiratory tract : Category 1 ; May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2 Label elements

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

Hazard pictograms



Health hazard (GHS08)

Signal word

Danger

Hazard components for labelling

DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES ; CAS No. : 9016-87-9

4,4'-METHYLENEDIPHENYL DIISOCYANATE ; CAS No. : 101-68-8

Hazard statements

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements

P284 Wear respiratory protection.

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P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Special rules for supplemental label elements for certain mixtures

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

XYLENE ; REACH registration No. : 01-2119488216-32 ; EC No. : 215-535-7; CAS No. : 1330-20-7

Weight fraction : $\geq 4 - < 9 \%$

Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Asp. Tox. 1 ; H304 STOT RE 2 ; H373 Acute Tox. 4 ;
H312 Acute Tox. 4 ; H332 Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319 STOT SE 3 ;
H335

REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE $< 0,01$) ; REACH registration No. : 01-2119555267-33 ; EC No. : 905-562-9

Weight fraction : $\geq 5 - < 10 \%$

Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 STOT RE 2 ; H373 Acute Tox. 4 ; H312 Acute Tox. 4 ;
H332 Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

ETHYL ACETATE ; REACH registration No. : 01-2119475103-46 ; EC No. : 205-500-4; CAS No. : 141-78-6

Weight fraction : $\geq 1 - < 5 \%$

Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319 STOT SE 3 ; H336

DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES ; CAS No. : 9016-87-9

Weight fraction : $\geq 1 - < 5 \%$

Classification 1272/2008 [CLP] : Resp. Sens. 1 ; H334 STOT RE 2 ; H373 Acute Tox. 4 ; H332 Skin Irrit. 2 ;
H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

4,4'-METHYLENEDIPHENYL DIISOCYANATE ; REACH registration No. : 01-2119457014-47- ; EC No. : 202-966-0; CAS No. : 101-68-8

Weight fraction : $< 1 \%$

Classification 1272/2008 [CLP] : Resp. Sens. 1 ; H334 Carc. 2 ; H351 STOT RE 2 ; H373 Acute Tox. 4 ; H332 Skin
Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

BIS (2,2,6,6-TETRAMETHYL-4-PIPERIDYL) SEBACATE ; REACH registration No. : 01-2119537297-32 ; EC No. : 258-207-9; CAS
No. : 52829-07-9

Weight fraction : $< 0,5 \%$

Classification 1272/2008 [CLP] : Eye Irrit. 2 ; H319 Aquatic Chronic 2 ; H411

TRIS(NONYLPHENYL) PHOSPHITE ; REACH registration No. : 01-2119520601-54 ; EC No. : 247-759-6; CAS No. : 26523-78-4

Weight fraction : $< 0,5 \%$

Classification 1272/2008 [CLP] : Skin Sens. 1 ; H317 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

Additional information

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

SECTION 4: First aid measures

4.1 Description of first aid measures

When in doubt or if symptoms are observed, get medical advice.

Following inhalation

Remove victim out of the danger area. Call a physician.

In case of skin contact

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Wash immediately with: Water Remove contaminated, saturated clothing immediately. In case of skin irritation, consult a physician. In case of skin reactions, consult a physician.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Never give anything by mouth to an unconscious person or a person with cramps. Do not induce vomiting - call a physician.

4.2 Most important symptoms and effects, both acute and delayed

May cause sensitization by inhalation.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Extinguishing powder alcohol resistant foam Carbon dioxide (CO₂) Water mist

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide. Oxides of nitrogen. Hydrogen cyanide.

5.3 Advice for firefighters

Remove persons to safety.

Special protective equipment for firefighters

Do not inhale explosion and combustion gases. Use appropriate respiratory protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Clear spills immediately. Wear a self-contained breathing apparatus and chemical protective clothing.

For non-emergency personnel

Remove persons to safety.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. 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). Collect in closed and suitable containers for disposal.

For cleaning up

The contaminated area should be cleaned up immediately with: Water Retain contaminated washing water and dispose it.

6.4 Reference to other sections

Reference to other sections Safe handling: see section 7 Personal protection equipment: see section 8

SECTION 7: Handling and storage

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7.1 Precautions for safe handling

Protective measures

Specific requirements or handling rules

Do not breathe dust. Do not breathe gas/fumes/vapour/spray. See section 8.

Advices on general occupational hygiene

Normal precautions taken when handling chemicals should be observed.

7.2 Conditions for safe storage, including any incompatibilities

Only use containers specifically approved for the substance/product.

Requirements for storage rooms and vessels

Keep in a cool, well-ventilated place. Protect against UV-radiation/sunlight Humidity.

Hints on joint storage

Storage class : 13

Storage class (TRGS 510) : 11

Keep away from

Store at least 3 metres apart from: Chemicals/products that react together readily

Further information on storage conditions

Keep container tightly closed and in a well-ventilated place.

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

XYLENE ; CAS No. : 1330-20-7

Limit value type (country of origin) : TRGS 900 (D)

Limit value : 100 ppm / 440 mg/m³

Peak limitation : 2(II)

Remark : H

Version : 06.11.2015

Limit value type (country of origin) : STEL (EC)

Limit value : 100 ppm / 442 mg/m³

Remark : H

Version : 08.06.2000

Limit value type (country of origin) : TWA (EC)

Limit value : 50 ppm / 221 mg/m³

Remark : H

Version : 08.06.2000

ETHYL ACETATE ; CAS No. : 141-78-6

Limit value type (country of origin) : TRGS 900 (D)

Limit value : 400 ppm / 1500 mg/m³

Peak limitation : 2(I)

Remark : Y

Version : 06.11.2015

DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES ; CAS No. : 9016-87-9

Limit value type (country of origin) : TRGS 900 (D)

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Parameter : E: inhalable fraction
Limit value : 0,05 mg/m³
Peak limitation : 1/=2=(I)
Remark : H, Sah, Y
Version : 06.11.2015

4,4'-METHYLENEDIPHENYL DIISOCYANATE ; CAS No. : 101-68-8

Limit value type (country of origin) : TRGS 900 (D)
Parameter : E: inhalable fraction
Limit value : 0,05 mg/m³
Peak limitation : 1/=2=(I)
Remark : H, Sa, Y
Version : 06.11.2015

Biological limit values

XYLENE ; CAS No. : 1330-20-7

Limit value type (country of origin) : TRGS 903 (D)
Parameter : Xylene / Whole blood (B) / End of exposure or end of shift
Limit value : 1,5 mg/l
Version : 31.03.2004

Limit value type (country of origin) : TRGS 903 (D)
Parameter : Methylhippuric acid / Urine (U) / End of exposure or end of shift
Limit value : 2 g/l
Version : 31.03.2004

4,4'-METHYLENEDIPHENYL DIISOCYANATE ; CAS No. : 101-68-8

Limit value type (country of origin) : TRGS 903 (D)
Parameter : 4,4'-Diaminodiphenylmethane / Urine (U) / End of exposure or end of shift
Limit value : 0,01 mg/g Kr
Version : 31.03.2004

DNEL/DMEL and PNEC values

DNEL/DMEL

Limit value type : DNEL Consumer (systemic) (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Dermal
Exposure frequency : Long-term (repeated)
Limit value : 108 mg/kg
Limit value type : DNEL Consumer (systemic) (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 14,8 mg/m³
Limit value type : DNEL Consumer (systemic) (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Oral
Exposure frequency : Long-term (repeated)
Limit value : 1,6 mg/kg
Limit value type : DNEL worker (local) (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Inhalation
Exposure frequency : Short-term (acute)
Limit value : 289 mg/kg
Limit value type : DNEL worker (systemic) (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Dermal
Exposure frequency : Long-term (repeated)
Limit value : 180 mg/kg
Limit value type : DNEL worker (systemic) (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 77 mg/m³

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Limit value type :	DNEL Consumer (systemic) (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	174 mg/m ³
Limit value type :	DNEL Consumer (systemic) (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	108 mg/kg
Limit value type :	DNEL Consumer (systemic) (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	14,8 mg/m ³
Limit value type :	DNEL Consumer (systemic) (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Exposure route :	Oral
Exposure frequency :	Long-term (repeated)
Limit value :	1,6 mg/kg
Limit value type :	DNEL worker (systemic) (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	289 mg/m ³
Limit value type :	DNEL worker (systemic) (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	180 mg/kg
Limit value type :	DNEL worker (systemic) (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	77 mg/m ³
Limit value type :	DNEL Consumer (local) (ETHYL ACETATE ; CAS No. : 141-78-6)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	367 mg/m ³
Limit value type :	DNEL Consumer (local) (ETHYL ACETATE ; CAS No. : 141-78-6)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	734 mg/m ³
Limit value type :	DNEL Consumer (systemic) (ETHYL ACETATE ; CAS No. : 141-78-6)
Exposure route :	Oral
Exposure frequency :	Long-term (repeated)
Limit value :	4,5 mg/kg
Limit value type :	DNEL Consumer (systemic) (ETHYL ACETATE ; CAS No. : 141-78-6)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	734 mg/m ³
Limit value type :	DNEL Consumer (systemic) (ETHYL ACETATE ; CAS No. : 141-78-6)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	37 mg/kg
Limit value type :	DNEL Consumer (systemic) (ETHYL ACETATE ; CAS No. : 141-78-6)

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Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 367 mg/m³
Limit value type : DNEL worker (local) (ETHYL ACETATE ; CAS No. : 141-78-6)
Exposure route : Inhalation
Exposure frequency : Short-term (acute)
Limit value : 1468 mg/m³
Limit value type : DNEL worker (local) (ETHYL ACETATE ; CAS No. : 141-78-6)
Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 734 mg/m³
Limit value type : DNEL worker (systemic) (ETHYL ACETATE ; CAS No. : 141-78-6)
Exposure route : Inhalation
Exposure frequency : Short-term (acute)
Limit value : 1468 mg/m³
Limit value type : DNEL worker (systemic) (ETHYL ACETATE ; CAS No. : 141-78-6)
Exposure route : Dermal
Exposure frequency : Long-term (repeated)
Limit value : 63 mg/kg
Limit value type : DNEL worker (systemic) (ETHYL ACETATE ; CAS No. : 141-78-6)
Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 734 mg/m³

PNEC

Limit value type : PNEC aquatic, freshwater (XYLENE ; CAS No. : 1330-20-7)
Limit value : 0,32 mg/l
Limit value type : PNEC aquatic, intermittent release (XYLENE ; CAS No. : 1330-20-7)
Limit value : 0,32 mg/l
Limit value type : PNEC aquatic, marine water (XYLENE ; CAS No. : 1330-20-7)
Limit value : 0,32 mg/l
Limit value type : PNEC sediment, freshwater (XYLENE ; CAS No. : 1330-20-7)
Limit value : 12,46 mg/kg
Limit value type : PNEC sediment, marine water (XYLENE ; CAS No. : 1330-20-7)
Limit value : 12,46 mg/kg
Limit value type : PNEC Soil (XYLENE ; CAS No. : 1330-20-7)
Limit value : 2,31 mg/kg
Limit value type : PNEC sewage treatment plant (STP) (XYLENE ; CAS No. : 1330-20-7)
Limit value : 6,58 mg/l
Limit value type : PNEC aquatic, freshwater (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Limit value : 0,32 mg/l
Limit value type : PNEC aquatic, intermittent release (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Limit value : 0,32 mg/l
Limit value type : PNEC aquatic, marine water (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Limit value : 0,32 mg/l
Limit value type : PNEC sediment, freshwater (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Limit value : 12,46 mg/kg
Limit value type : PNEC sediment, marine water (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Limit value : 12,46 mg/kg
Limit value type : PNEC Soil (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))

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Limit value :	2,31 mg/kg
Limit value type :	PNEC sewage treatment plant (STP) (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Limit value :	6,58 mg/kg
Limit value type :	PNEC aquatic, freshwater (ETHYL ACETATE ; CAS No. : 141-78-6)
Limit value :	0,26 mg/l
Limit value type :	PNEC aquatic, intermittent release (ETHYL ACETATE ; CAS No. : 141-78-6)
Limit value :	1,65 mg/l
Limit value type :	PNEC aquatic, marine water (ETHYL ACETATE ; CAS No. : 141-78-6)
Limit value :	0,02 mg/l
Limit value type :	PNEC sediment, freshwater (ETHYL ACETATE ; CAS No. : 141-78-6)
Limit value :	1,25 mg/kg
Limit value type :	PNEC sediment, marine water (ETHYL ACETATE ; CAS No. : 141-78-6)
Limit value :	0,12 mg/kg
Limit value type :	PNEC Soil (ETHYL ACETATE ; CAS No. : 141-78-6)
Limit value :	0,24 mg/kg
Limit value type :	PNEC Secondary Poisoning (ETHYL ACETATE ; CAS No. : 141-78-6)
Limit value :	0,2 g/kg
Limit value type :	PNEC sewage treatment plant (STP) (ETHYL ACETATE ; CAS No. : 141-78-6)
Limit value :	650 mg/l

8.2 Exposure controls

Appropriate engineering controls

If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Personal protection equipment



When using do not eat, drink, smoke, sniff.

Eye/face protection

Suitable eye protection

Eye glasses with side protection

Skin protection

Hand protection

Wear rubber gloves approved under standard EN374.

Respiratory protection

Usare un respiratore su misura ad aria purificata o con presa aria esterna conforme agli standard approvati se la valutazione di un rischio ne indica la necessità. La scelta del respiratore deve basarsi sui livelli di esposizione noti o previsti, i rischi del prodotto e i limiti di funzionamento sicuro del respiratore prescelto. Raccomandato: Maschera facciale integrale con filtro ABEK.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Safety relevant basis data

Aspect		Pasta
Colour		No data available
Odour		light
Melting point/melting range :	(1013 hPa)	No data available
Vapour density	(air = 1)	Data not available

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Initial boiling point and boiling range :	(1013 hPa)	No data available
Decomposition temperature :		No data available
Self flammability	>	250 °C
Flash point :	>	100 °C
Flammability (solid, gas)		Data not available
Lower explosion limit :		No data available
Upper explosion limit :		No data available
Explosive properties		Data not available
Vapour pressure	(20 °C)	No data available
Density :	(20 °C)	approx. 1,2 g/cm ³
Density :	(23 °C)	No data available
Water solubility :	(20 °C)	No data available
pH :		not applicable
Log Pow	(20 °C)	not applicable
Viscosity :	(20 °C)	No data available
Viscosity :	(23 °C)	No data available
Odour threshold		Data not available
Evaporation rate		Data not available
Oxidizing properties		Non oxydising

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

See section 7. No additional measures necessary.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Avoid temperatures >30 °C.

10.5 Incompatible materials

Acids and strong oxidants. Alcohol Water.

10.6 Hazardous decomposition products

Carbon monoxide. Oxides of nitrogen. Hydrogen cyanide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity

Parameter : LD50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Oral
Species : Rat
Effective dose : 8700 mg/kg

Acute dermal toxicity

Parameter : LD50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Dermal
Species : Rabbit
Effective dose : 2000 mg/kg

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Acute inhalation toxicity

Parameter : LC50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Inhalation
Species : Rat
Effective dose : 6350 mg/l

Irritant and corrosive effects

Primary irritation to the skin

Causes skin irritation.

Irritation to eyes

Eye irritation: slightly irritating.

Irritation to respiratory tract

Slightly irritant to respiratory tract

Sensitisation

In case of skin contact

May cause an allergic skin reaction.

In case of inhalation

May cause sensitization by inhalation.

Repeated dose toxicity (subacute, subchronic, chronic)

Subacute oral toxicity

Parameter : NOAEL(C) (ETHYL ACETATE ; CAS No. : 141-78-6)
Exposure route : Oral
Species : Rat
Effective dose : 900 mg/kg bw/day

Ingestion causes nausea, weakness and central nervous system effects.

Subacute inhalation toxicity

Parameter : NOAEL(C) (ETHYL ACETATE ; CAS No. : 141-78-6)
Exposure route : Inhalation
Species : Rat
Effective dose : 350 ppm

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

The ingredients in this mixture do not meet the criteria for classification as CMR according to CLP.

Reproductive toxicity

Developmental toxicity/teratogenicity

One generation reproduction toxicity test

Parameter : NOAEL(C) (ETHYL ACETATE ; CAS No. : 141-78-6)
Species : Mouse
Effective dose : 13800 mg/kg bw/day

Two generation reproduction toxicity test

Parameter : NOAEL(C) (ETHYL ACETATE ; CAS No. : 141-78-6)
Species : Mouse
Effective dose : 20700 mg/kg bw/day

SECTION 12: Ecological information

Do not allow uncontrolled discharge of product into the environment.

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter : LC50 (XYLENE ; CAS No. : 1330-20-7)
Species : Oncorhynchus mykiss (Rainbow trout)
Effective dose : 2,6 mg/l

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Exposure time : 96 h
Parameter : LC50 (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Species : Salmo trutta fario (L) (Freshwater trout)
Effective dose : 2,6 mg/l
Exposure time : 96 h
Parameter : LC50 (ETHYL ACETATE ; CAS No. : 141-78-6)
Species : Salmo trutta fario (L) (Freshwater trout)
Effective dose : 230 mg/l
Exposure time : 96 h

Chronic (long-term) fish toxicity

Parameter : NOEC (XYLENE ; CAS No. : 1330-20-7)
Species : Oncorhynchus mykiss (Rainbow trout)
Effective dose : > 1,3 mg/l
Exposure time : 56 g

Acute (short-term) daphnia toxicity

Parameter : EC50 (XYLENE ; CAS No. : 1330-20-7)
Effective dose : 1 mg/l
Exposure time : 24 h
Parameter : IC50 (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Species : Daphnia magna (Big water flea)
Effective dose : 1 mg/l
Exposure time : 24 h
Parameter : EC50 (ETHYL ACETATE ; CAS No. : 141-78-6)
Species : Daphnia magna (Big water flea)
Effective dose : 165 mg/l
Exposure time : 48 h

Chronic (long-term) daphnia toxicity

Parameter : NOEC (XYLENE ; CAS No. : 1330-20-7)
Effective dose : 1,57 mg/l
Exposure time : 21 g
Parameter : NOEC (ETHYL ACETATE ; CAS No. : 141-78-6)
Species : Daphnia pulex (water flea)
Effective dose : 2,4 mg/l
Exposure time : 21 g

Acute (short-term) algae toxicity

Parameter : EC0 (XYLENE ; CAS No. : 1330-20-7)
Species : Pseudokirchneriella subcapitata
Effective dose : 0,44 mg/l
Exposure time : 73 h
Parameter : ErC50 (XYLENE ; CAS No. : 1330-20-7)
Species : Pseudokirchneriella subcapitata
Effective dose : 4,36 mg/l
Exposure time : 73 h
Parameter : EC10 (REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE, (BENZENE < 0,01))
Species : Selenastrum capricornutum
Effective dose : 1,9 mg/l
Exposure time : 73 h
Parameter : EC50 (DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES ; CAS No. : 9016-87-9)
Species : Acute (short-term) daphnia toxicity
Effective dose : > 100 mg/l
Exposure time : 3 h

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Parameter : EC50 (DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES ; CAS No. : 9016-87-9)
Species : Acute (short-term) daphnia toxicity
Evaluation parameter : Daphnia magna
Effective dose : > 1000 mg/l
Exposure time : 24 h

Chronic (long-term) algae toxicity

Parameter : NOEC (ETHYL ACETATE ; CAS No. : 141-78-6)
Species : Scenedesmus subspicatus
Effective dose : > 100 mg/l
Exposure time : 72 h

Bacteria toxicity

Parameter : EC50 (ETHYL ACETATE ; CAS No. : 141-78-6)
Species : Photobacterium phosphoreum
Effective dose : 5870 mg/l
Exposure time : 15 min

12.2 Persistence and degradability

Biodegradation

Parameter : Biodegradation (ETHYL ACETATE ; CAS No. : 141-78-6)
Effective dose : > 70 %
Exposure time : 28 g

12.3 Bioaccumulative potential

Parameter : Bioconcentration factor (BCF) (ETHYL ACETATE ; CAS No. : 141-78-6)
Concentration : 30

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

None

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Dispose according to legislation.

SECTION 14: Transport information

14.1 UN number

No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

14.4 Packing group

No dangerous good in sense of these transport regulations.

14.5 Environmental hazards

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No dangerous good in sense of these transport regulations.

14.6 Special precautions for user

None

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

not applicable

SECTION 15: Regulatory information

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

EU legislation

Regulation (EC) 1907/2006/CE (REACH). Regulation (EC) No 1272/2008 (CLP). Regulation (EU) 2015/830 requirements for the compilation of safety data sheets. Commission Regulation (EC) No 790/2009/CE (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 286/2011 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 618/2012 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 487/2013 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 758/2013 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 944/2013 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 605/2014 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 1297/2015 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008).

Other regulations (EU)

Regulation (CE) 1907/2006: Substance of very high concern included in the SVHC Candidate List

None

National regulations

Italy: Legislative Decree 81/2008 (Consolidated Law on protection of health and safety at work), as amended and Directive 2009/161/UE - chemical risk assessment in accordance with Title IX

Technische Anleitung Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : < 5 %

Water hazard class (WGK)

Class : 2 (Hazardous to water) Classification according to VwVwS

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Indication of changes

None

16.2 Abbreviations and acronyms

LEGENDA:

ADR:	Accord européen relative au transport international des marchandises dangereuses par route (accordo europeo relativo al trasporto internazionale delle merci pericolose su strada)
ASTM:	ASTM International, originariamente nota come American Society for Testing and Materials (ASTM)
EINECS:	European Inventory of Existing Commercial Chemical Substances (Registro Europeo delle Sostanze chimiche in Commercio)
EC(0/50/100):	Effective Concentration 0/50/100 (Concentrazione Effettiva Massima per 0/50/100% degli Individui)
LC(0/50/100):	Lethal Concentration 0/50/100 (Concentrazione Letale per 0/50/100% degli Individui)
IC50:	Inhibitor Concentration 50 (Concentrazione Inibente per il 50% degli Individui)
NOEL:	No Observed Effect Level (Dose massima senza effetti)
NOEC:	No Observed Effect Concentration (Concentrazione massima senza effetti)

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LOEC:	Lowest Observed Effect Concentration (Concentrazione massima alla quale è possibile evidenziare un effetto)
DNEL:	Derived No Effect Level (Dose derivata di non effetto)
DMEL:	Derived Minimum Effect Level (Dose derivata di minimo effetto)
CLP:	Classification, Labelling and Packaging (Classificazione, Etichettatura e Imballaggio)
CSR:	Rapporto sulla Sicurezza Chimica (Chemical Safety Report)
LD(0/50/100):	Lethal Dose 0/50/100 (Dose Letale per 0/50/100% degli Individui)
IATA:	International Air Transport Association (Associazione Internazionale del Trasporto Aereo)
ICAO:	International Civil Aviation Organization (Organizzazione Internazionale dell'Aviazione Civile)
Codice IMDG:	International Maritime Dangerous Goods code (Codice sul Regolamento del Trasporto Marittimo)
PBT:	Persistent, bioaccumulative and toxic (sostanze persistenti bioaccumulabili e tossiche)
RID:	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regolamento concernente il trasporto Internazionale ferroviario delle merci Pericolose)
STEL:	Short term exposure limit (limite di esposizione a breve termine)
TLV:	Threshold limit value (soglia di valore limite)
TWA:	Time Weighted Average (media ponderata nel tempo)
UE:	Unione Europea
vPvB:	Very persistent very bioaccumulative (sostanze molto persistenti e molto bioaccumulabili)
N.D.:	Non disponibile.
N.A.:	Non applicabile
VwVwS.:	Text of Administrative Regulation on the Classification of Substances hazardous to waters into Water Hazard Classes (Verwaltungsvorschrift wassergefährdende Stoffe – VwVWS)
PNEC:	Predicted No Effect Concentration
PNOS:	Particulates not Otherwise Specified
BOD:	Biochemical Oxygen Demand
COD:	Chemical Oxygen Demand
BCF:	BioConcentration Factor
TRGS :	Technische Regeln für Gefahrstoffe -Technical Rules for Hazardous Substances, defined by The Federal Institute for Occupational Safety and Health, Germany
LCLo:	Lethal Concentration Low (La minima concentrazione letale)
ThOD:	Theoretical Oxygen Demand

16.3 Key literature references and sources for data

None

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

calculated.

16.5 Relevant H- and EUH-phrases (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.
H312+H332	Harmful in contact with skin or if inhaled.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
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.

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16.6 Training advice

None

16.7 Additional information

None

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.
