SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830

T-REX solvent based

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

1.1. Product identifier

Product name : T-REX solvent based
Registration number REACH : Not applicable (mixture)
Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Adhesive

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

SOUDAL N.V.
Everdongenlaan 18-20
B-2300 Turnhout
☎ +32 14 42 42 31
 +32 14 42 65 14
msds@soudal.com

Manufacturer of the product

SOUDAL N.V.
Everdongenlaan 18-20
B-2300 Turnhout
☎ +32 14 42 42 31
 +32 14 42 65 14
msds@soudal.com

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch):
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Flam. Liq.	category 2	H225: Highly flammable liquid and vapour.
Eye Irrit.	category 2	H319: Causes serious eye irritation.
Skin Irrit.	category 2	H315: Causes skin irritation.
Aquatic Chronic	category 3	H412: Harmful to aquatic life with long lasting effects.

2.2. Label elements


Signal word Danger

H-statements

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H412 Harmful to aquatic life with long lasting effects.

P-statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves, protective clothing and eye protection/face protection.
P332 + P313 If skin irritation occurs: Get medical advice/attention.

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard
Caution! Substance is absorbed through the skin

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark
acetone 01-2119471330-49	67-64-1 200-662-2	1%<C<10%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent
hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane 01-2119475514-35		2.5%<C<10%	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(10)	UVCB
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 01-2119475515-33		2.5%<C<10%	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(10)	UVCB
xylene 01-2119488216-32	1330-20-7 215-535-7	1%<C<10%	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Asp. Tox. 1; H304 STOT RE 2; H373 Eye Irrit. 2; H319 STOT SE 3; H335 Skin Irrit. 2; H315	(1)(2)(10)	Constituent
ethylbenzene 01-2119489370-35	100-41-4 202-849-4	1%<C<10%	Flam. Liq. 2; H225 Acute Tox. 4; H332 Asp. Tox. 1; H304 STOT RE 2; H373 Aquatic Chronic 3; H412	(1)(2)(6)(10)	Constituent

(1) For H-statements in full: see heading 16
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006
(2) Substance with a Community workplace exposure limit
(6) Enumerated in Annex VI of Regulation (EC) No. 1272/2008 but the classification has been adapted after evaluation of available test data

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

GENERAL. Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Wash immediately with lots of water. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse immediately with plenty of water. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Consult a doctor/medical service if you feel

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

4.2.1 Acute symptoms

After inhalation:

EXPOSURE TO HIGH CONCENTRATIONS: Headache. Nausea.

After skin contact:

Tingling/irritation of the skin.

After eye contact:

Irritation of the eye tissue.

After ingestion:

No effects known.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Polyvalent foam. BC powder. Carbon dioxide.

5.1.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture

Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

5.3.1 Instructions:

Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective goggles. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Protective goggles. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Contain leaking substance. Dam up the solid spill. Try to reduce evaporation. Prevent soil and water pollution. Prevent spreading in sewers. Use appropriate containment to avoid environmental contamination.

6.3. Methods and material for containment and cleaning up

Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

See heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Keep away from naked flames/heat. Insufficient ventilation: keep naked flames/sparks away. Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Gas/vapour heavier than air at 20°C. Observe normal hygiene standards. Keep container tightly closed. Remove contaminated clothing immediately. Do not discharge the waste into the drain.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Storage temperature: 20 °C. Store in a dry area. Ventilation at floor level. Store at room temperature. Meet the legal requirements. Max. storage time: 1 year(s).

7.2.2 Keep away from:

Heat sources, ignition sources.

7.2.3 Suitable packaging material:

Synthetic material.

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

The Netherlands

Aceton	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	501 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1210 mg/m³
	Short time value (Public occupational exposure limit value)	1002 ppm
	Short time value (Public occupational exposure limit value)	2420 mg/m³
Ethylbenzeen	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	49 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	215 mg/m³
	Short time value (Public occupational exposure limit value)	97 ppm
	Short time value (Public occupational exposure limit value)	430 mg/m³
Xyleen (o-,m- en p-isomeren)	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	48 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	210 mg/m³
	Short time value (Public occupational exposure limit value)	100 ppm
	Short time value (Public occupational exposure limit value)	442 mg/m³

EU

Acetone	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	500 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1210 mg/m³
Ethylbenzene	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	100 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	442 mg/m³
	Short time value (Indicative occupational exposure limit value)	200 ppm
	Short time value (Indicative occupational exposure limit value)	884 mg/m³
Xylene, mixed isomers, pure	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	50 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	221 mg/m³
	Short time value (Indicative occupational exposure limit value)	100 ppm
	Short time value (Indicative occupational exposure limit value)	442 mg/m³

Belgium

Acétone	Time-weighted average exposure limit 8 h	500 ppm
	Time-weighted average exposure limit 8 h	1210 mg/m³
	Short time value	1000 ppm
	Short time value	2420 mg/m³
Ethylbenzène	Time-weighted average exposure limit 8 h	100 ppm
	Time-weighted average exposure limit 8 h	442 mg/m³
	Short time value	125 ppm
	Short time value	551 mg/m³
Xylène, isomères mixtes, purs	Time-weighted average exposure limit 8 h	50 ppm
	Time-weighted average exposure limit 8 h	221 mg/m³
	Short time value	100 ppm
	Short time value	442 mg/m³

USA (TLV-ACGIH)

Acetone	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	250 ppm
	Short time value (TLV - Adopted Value)	500 ppm
Ethyl benzene	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	20 ppm
Xylene (all isomers)	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	100 ppm
	Short time value (TLV - Adopted Value)	150 ppm

Germany

Aceton	Time-weighted average exposure limit 8 h (TRGS 900)	500 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	1200 mg/m³
Ethylbenzol	Time-weighted average exposure limit 8 h (TRGS 900)	20 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	88 mg/m³
Xylol (alle Isomeren)	Time-weighted average exposure limit 8 h (TRGS 900)	100 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	440 mg/m³

France

Acétone	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	500 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	1210 mg/m³
	Short time value (VRC: Valeur réglementaire contraignante)	1000 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	2420 mg/m³
Ethylbenzène	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	20 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	88.4 mg/m³
	Short time value (VRC: Valeur réglementaire contraignante)	100 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	442 mg/m³
Xylènes, isomères mixtes, purs	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	50 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	221 mg/m³
	Short time value (VRC: Valeur réglementaire contraignante)	100 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	442 mg/m³

UK

Acetone	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	500 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1210 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	1500 ppm
	Short time value (Workplace exposure limit (EH40/2005))	3620 mg/m³
Ethylbenzene	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	100 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	441 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	125 ppm
	Short time value (Workplace exposure limit (EH40/2005))	552 mg/m³
Xylene, o-,m-,p- or mixed isomers	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	50 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	220 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	100 ppm
	Short time value (Workplace exposure limit (EH40/2005))	441 mg/m³

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

If applicable and available it will be listed below.

Acetone (ketones 1)	NIOSH	1300
Acetone (ketones I)	NIOSH	2555
Acetone (organic and inorganic gases by Extractive FTIR)	NIOSH	3800
Acetone (Volatile Organic compounds)	NIOSH	2549
ACETONE and METHYL ETHYL KETONE in urine	NIOSH	8319
Acetone	OSHA	69
Ethyl Benzene (Hydrocarbons, Aromatic)	NIOSH	1501
Ethyl Benzene	OSHA	1002
Ethyl Benzene	OSHA	7
Xylene (Hydrocarbons, aromatic)	NIOSH	1501
Xylene (Volatile Organic compounds)	NIOSH	2549

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 DNEL/PNEC values

DNEL/DMEL - Workers

acetone

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Acute local effects inhalation	2420 mg/m³	
	Long-term systemic effects dermal	186 mg/kg bw/day	
	Long-term systemic effects inhalation	1210 mg/m³	

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	2035 mg/m³	
	Long-term systemic effects dermal	773 mg/kg bw/day	

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	2085 mg/m³	
	Long-term systemic effects dermal	300 mg/kg bw/day	

xylene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	77 mg/m³	
	Acute systemic effects inhalation	289 mg/m³	
	Acute local effects inhalation	289 mg/m³	
	Long-term systemic effects dermal	180 mg/kg bw/day	

ethylbenzene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	77 mg/m³	
	Acute local effects inhalation	293 mg/m³	
	Long-term systemic effects dermal	180 mg/kg bw/day	

DNEL/DMEL - General population

acetone

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects dermal	62 mg/kg bw/day	
	Long-term systemic effects inhalation	200 mg/m³	
	Long-term systemic effects oral	62 mg/kg bw/day	

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term local effects inhalation	608 mg/m³	
	Long-term systemic effects dermal	699 mg/kg bw/day	
	Long-term systemic effects oral	699 mg/kg bw/day	

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	447 mg/m³	
	Long-term systemic effects dermal	149 mg/kg bw/day	
	Long-term systemic effects oral	149 mg/kg bw/day	

xylene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	14.8 mg/m³	
	Acute systemic effects inhalation	174 mg/m³	
	Acute local effects inhalation	174 mg/m³	
	Long-term systemic effects dermal	108 mg/kg bw/day	
	Long-term systemic effects oral	1.6 mg/kg bw/day	

ethylbenzene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	15 mg/m³	
	Long-term systemic effects oral	1.6 mg/kg bw/day	

PNEC

acetone

Compartments	Value	Remark
Fresh water	10.6 mg/l	
Marine water	1.06 mg/l	
Aqua (intermittent releases)	21 mg/l	
Fresh water sediment	30.4 mg/kg sediment dw	
Marine water sediment	3.04 mg/kg sediment dw	
Soil	29.5 mg/kg soil dw	
STP	100 mg/l	

xylene

Compartments	Value	Remark
Fresh water	0.327 mg/l	
Marine water	0.327 mg/l	
Aqua (intermittent releases)	0.327 mg/l	
STP	6.58 mg/l	
Fresh water sediment	12.46 mg/kg sediment dw	
Marine water sediment	12.46 mg/kg sediment dw	
Soil	2.31 mg/kg soil dw	

ethylbenzene

Compartments	Value	Remark
Fresh water	0.1 mg/l	
Marine water	0.01 mg/l	
Aqua (intermittent releases)	0.1 mg/l	
STP	9.6 mg/l	
Fresh water sediment	13.7 mg/kg sediment dw	
Marine water sediment	1.37 mg/kg sediment dw	
Soil	2.68 mg/kg soil dw	
Oral	0.02 g/kg food	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Insufficient ventilation: keep naked flames/sparks away. Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Measure the concentration in the air regularly. Work under local exhaust/ventilation.

8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Keep container tightly closed. Do not eat, drink or smoke during work.

a) Respiratory protection:

Wear gas mask with filter type A if conc. in air > exposure limit.

b) Hand protection:

Gloves.

c) Eye protection:

Protective goggles.

d) Skin protection:

Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Paste
Odour	Characteristic odour
Odour threshold	No data available
Colour	Variable in colour, depending on the composition
Particle size	No data available
Explosion limits	No data available
Flammability	Highly flammable liquid and vapour.
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	No data available
Boiling point	No data available
Flash point	< 23 °C
Evaporation rate	No data available
Relative vapour density	> 1
Vapour pressure	< 1100 hPa ; 50 °C
Solubility	water ; insoluble
	organic solvents ; soluble
Relative density	1.36
Decomposition temperature	No data available
Auto-ignition temperature	No data available
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	No data available

9.2. Other information

Absolute density	1360 kg/m³

SECTION 10: Stability and reactivity

10.1. Reactivity
May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
Keep away from naked flames/heat. Insufficient ventilation: keep naked flames/sparks away. Insufficient ventilation: use spark-/explosionproof appliances and lighting system.

10.5. Incompatible materials
No data available.

10.6. Hazardous decomposition products
Upon combustion: CO and CO2 are formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
11.1.1 Test results

Acute toxicity

T-REX solvent based

No (test)data on the mixture available

acetone

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	5800 mg/kg		Rat (female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	20000 mg/kg		Rabbit (male)	Experimental value	
Dermal	LD50		> 7426 mg/kg bw		Rabbit (female)	Weight of evidence	
Inhalation (vapours)	LC50	Other	76 mg/l	4 h	Rat (female)	Experimental value	
Inhalation (vapours)	LCL0	Other	16000 ppm	4 h	Rat	Experimental value	

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Other	> 5840 mg/kg bw		Rat (male/female)	Read-across	
Dermal	LD50	Other	> 2800 mg/kg bw	24 week(s)	Rat (male/female)	Similar product	
Inhalation (vapours)	LC50	Other	> 25.2 mg/l	4 h	Rat (male/female)	Experimental value	

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Other	> 5840 mg/kg bw		Rat (male/female)	Read-across	
Dermal	LD50	Other	> 2800 mg/kg bw	24 h	Rat (male/female)	Read-across	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 23.3 mg/l air	4 h	Rat (male/female)	Read-across	

xylene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	3523 mg/kg bw		Rat (male)	Experimental value	
Oral	LD50	OECD 401	> 4000 mg/kg bw		Rat (female)	Experimental value	
Dermal	LD50	OECD 402	> 4200 mg/kg bw	4 h	Rabbit (male)	Experimental value	
Inhalation (vapours)	LC50	OECD 403	27.57 mg/l	4 h	Rat (male)	Experimental value	

ethylbenzene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		3500 mg/kg		Rat (male/female)	Experimental value	
Dermal	LD50		15432 mg/kg	24 h	Rabbit (male)	Experimental value	
Inhalation	LC50		1432 ppm	4 h	Mouse (male)	Experimental value	

Judgement is based on the relevant ingredients

Conclusion

Not classified for acute toxicity

Corrosion/irritation

T-REX solvent based

No (test)data on the mixture available

acetone

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	OECD 405		24; 48; 72 hours	Rabbit	Weight of evidence	
Skin	Not irritating	Other	3 day(s)	24; 48; 72 hours	Guinea pig	Weight of evidence	
Inhalation	Slightly irritating	Human observation study	20 minutes		Human	Literature	

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Other			Rabbit	Read-across	
Skin	Irritating	Equivalent to OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Other			Rabbit	Read-across	Single treatment
Skin	Irritating	Equivalent to OECD 404	4 h	24; 48; 72 hours	Rabbit	Read-across	

xylene

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Moderately irritating	OECD 405		24; 48; 72 hours	Rabbit	Experimental value	
Skin	Moderately irritating		24 h	24; 72 hours	Rabbit	Experimental value	
Inhalation (vapours)	Irritating		4 h		Human		
	Irritating; STOT SE cat.3					Literature study	

ethylbenzene

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Slightly irritating			7 days	Rabbit	Experimental value	
Skin	Moderately irritating		24 h		Rabbit	Experimental value	

Classification is based on the relevant ingredients

Conclusion

Causes skin irritation.

Causes serious eye irritation.

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

T-REX solvent based

No (test)data on the mixture available

acetone

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Guinea pig maximisation test		48 hours	Hamster (female)	Experimental value	
Skin	Not sensitizing	Human observation			Human	Literature	

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406		24; 48 hours	Guinea pig (male/female)	Read-across	

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406		24; 48 hours	Guinea pig (male/female)	Read-across	

xylene

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 429			Mouse	Experimental value	

ethylbenzene

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Other			Human	Inconclusive, insufficient data	

Judgement is based on the relevant ingredients

Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

Specific target organ toxicity

T-REX solvent based

No (test)data on the mixture available

acetone

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral	NOAEL	Equivalent to OECD 408	20 mg/l		No effect	13 week(s)	Mouse (male/female)	Experimental value
Dermal								Not relevant, expert
Inhalation (vapours)	NOAEC	Other	19000 ppm		No effect	8 week(s)	Rat (male)	Literature
Inhalation (vapours)		Human observation study	361 ppm	Central nervous system	neurotoxic effects	2 day(s)	Human	Inconclusive, insufficient data

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Inhalation (vapours)	NOAEC	Other	4200 mg/m³ air		No effect	3 days (8h/day)	Rat (male)	Experimental value
Inhalation (vapours)	NOAEC	Equivalent to OECD 413	6646 ppm		No effect	13 weeks (6h/day, 5 days/week)	Rat (male/female)	Read-across
Inhalation (vapours)	NOAEC	Equivalent to OECD 413	2220 ppm		No effect	13 weeks (6h/day, 5 days/week)	Rat (male/female)	Read-across
Inhalation (vapours)	LOAEC	Other	14 g/m³	Central nervous system	Behavioural disturbances	3 days (8h/day)	Rat (male)	Experimental value

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Inhalation (vapours)	NOAEC	Subchronic toxicity test	12470 mg/m³ air	Central nervous system	No effect	16 weeks (daily)	Rat (male)	Read-across
Inhalation (vapours)	NOAEL	Equivalent to OECD 413	12350 mg/m³ air		No adverse systemic effects	26 weeks (6h/day, 5 days/week)	Rat (male/female)	Read-across
Inhalation (vapours)	LOAEL	Equivalent to OECD 413	1650 mg/m³ air	Central nervous system	CNS depression	26 weeks (6h/day, 5 days/week)	Rat (male/female)	Read-across

xylene

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	LOAEL	Equivalent to OECD 408	150 mg/kg bw/day	Liver	Weight gain	90 day(s)	Rat (male)	Experimental value
Oral	NOAEL	Other	250 mg/kg bw/day		No effect	103 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value
Inhalation (vapours)	NOAEC	Subchronic toxicity test	≥ 3515 mg/m³		No effect	13 weeks (6h/day, 5 days/week)	Rat (male)	Experimental value

ethylbenzene

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral	NOAEL	OECD 407	75 mg/kg bw/day	Liver	Enlargement/affection of the liver	28 day(s)	Rat (male/female)	Experimental value
Oral	NOAEL	OECD 408	75 mg/kg bw/day	Liver	Enlargement/affection of the liver	13 week(s)	Rat (male/female)	Experimental value
Oral	LOAEL	OECD 408	250 mg/kg bw/day	Liver	Enlargement/affection of the liver	13 week(s)	Rat (male/female)	Experimental value
Oral	NOAEL	Equivalent to OECD 424	500 mg/kg bw/day		No effect	90 day(s)	Rat (male/female)	Experimental value
Inhalation (vapours)	LOAEC	Equivalent to OECD 453	75 ppm		No effect	104 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value
Inhalation	NOAEL	Equivalent to OECD 413	1000 ppm		No effect	13 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value
Inhalation	NOAEC	OECD 412	800 ppm	Liver		4 weeks (6h/day, 5 days/week)	Mouse (male/female)	Experimental value
Inhalation	NOAEC	OECD 412	800 ppm	Liver	Enlargement/affection of the liver	4 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value

Judgement is based on the relevant ingredients

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

T-REX solvent based

No (test)data on the mixture available

acetone

Result	Method	Test substrate	Effect	Value determination
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value
Negative	Equivalent to OECD 473	Chinese hamster ovary (CHO)	No effect	Experimental value

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Result	Method	Test substrate	Effect	Value determination
Negative	Equivalent to OECD 473	Rat liver cells	No effect	Read-across
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Read-across
Negative	OECD 476		No effect	Read-across

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Result	Method	Test substrate	Effect	Value determination
Negative	Equivalent to OECD 473	Rat liver cells	No effect	Read-across
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Read-across
Negative	OECD 476	Human lymphocytes	No effect	Read-across

xylene

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	Other	Chinese hamster ovary (CHO)	No effect	Experimental value

ethylbenzene

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Experimental value
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)	No effect	Experimental value

Mutagenicity (in vivo)

T-REX solvent based

No (test)data on the mixture available

acetone

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative		13 week(s)	Mouse (male/female)		Literature

xylene

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 478		Mouse (male/female)		Experimental value

ethylbenzene

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	OECD 486	6 h	Mouse (male/female)		Experimental value
Negative	OECD 474	48 h	Mouse (male)		Experimental value

Carcinogenicity

T-REX solvent based

No (test)data on the mixture available

acetone

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Dermal	NOEL	Other	79 mg	51 week(s)	Mouse (female)	No effect		Literature

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation								Data waiving
Dermal								Data waiving
Oral								Data waiving

xylene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Oral	NOAEC	Not further determined	≥ 1000 mg/kg bw/day	103 weeks (5 days/week)	Mouse (male/female)	No carcinogenic effect		Experimental value
Oral	NOAEC	Not further determined	≥ 500 mg/kg bw/day	103 weeks (5 days/week)	Rat (male/female)	No carcinogenic effect		Experimental value

ethylbenzene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (vapours)	NOAEC	Equivalent to OECD 453	250 ppm	104 weeks (6h/day, 5 days/week)	Rat (male/female)	No effect		Experimental value

Reproductive toxicity

T-REX solvent based

No (test)data on the mixture available

acetone

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	Equivalent to OECD 414	11000 ppm	6-19 days (gestation, daily)	Rat (male/female)			Experimental value
Effects on fertility	NOAEL	Other	900 mg/kg bw/day	13 week(s)	Rat (male)	No effect		Literature

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	Other	≥ 1200 ppm	10 days (6h/day)	Rat	No effect		Read-across
	NOAEL	Equivalent to OECD 414	3000 ppm	10 days (6h/day)	Mouse	No effect		Read-across
	LOAEL	Equivalent to OECD 414	9000 ppm	10 days (6h/day)	Mouse	Minor skeletal variations	Skeleton	Read-across
Maternal toxicity	NOAEC		1200 ppm		Rat (female)	No effect		Read-across
	NOAEL	Equivalent to OECD 414	900 ppm	10 days (6h/day)	Rat (female)	No effect		Read-across
	LOAEL	Equivalent to OECD 414	3000 ppm	10 days (6h/day)	Rat (female)	Lung tissue affection/degeneration	Lungs	Read-across
Effects on fertility	NOAEL (P/F1)	Equivalent to OECD 416	9000 ppm		Rat (male/female)	No effect		Read-across

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	Other	1200 ppm	10 days (6h/day)	Rat	No effect		Read-across
	NOAEL	Equivalent to OECD 414	10560 mg/m³ air	10 days (6h/day)	Mouse	No effect		Read-across
	LOAEL	Equivalent to OECD 414	31680 mg/m³ air	10 days (6h/day)	Mouse	Minor skeletal variations	Foetus	Read-across
Maternal toxicity	NOAEC		1200 ppm		Rat (female)	No effect		Read-across
	NOAEL	Equivalent to OECD 414	3168 mg/m³ air	10 days (6h/day)	Rat (female)	No effect		Read-across
	LOAEL	Equivalent to OECD 414	10560 mg/m³ air	10 days (6h/day)	Rat (female)	Lung tissue affection/degeneration	Lungs	Read-across
Effects on fertility	NOAEL (P/F1)	Equivalent to OECD 416	31680 mg/m³ air		Rat (male/female)	No effect		Read-across

xylene

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	Equivalent to OECD 414	500 ppm	15 days (6h/day)	Rat (male/female)	No effect	Foetus	Experimental value
Maternal toxicity	NOAEC	Equivalent to OECD 414	500 ppm		Rat	No effect		Experimental value
Effects on fertility	NOAEC (P)	EPA OPPTS 870.3800	≥ 500 ppm	70 days (6h/day)	Rat (male/female)	No effect		Experimental value
	NOAEC (F1)	EPA OPPTS 870.3800	≥ 500 ppm	70 days (6h/day)	Rat (male/female)	No effect		Experimental value

ethylbenzene

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	OECD 414	500 ppm	15 days (gestation, daily)	Rat (female)	No effect		Experimental value
	NOAEC	OECD 426	500 ppm	70 days (6h/day)	Rat (male/female)	No effect		Experimental value
Effects on fertility	NOAEC (P/F1/F2)	OECD 416	500 ppm	70 days (6h/day)	Rat (male/female)	No effect		Experimental value
	NOAEC (P)	Equivalent to OECD 415	1000 ppm	2 week(s)	Rat (male/female)	No effect		Experimental value
	NOEC (F1)	Equivalent to OECD 415	100 ppm		Rat (male/female)	No effect		Experimental value
	NOAEL	Other	750 ppm	104 weeks (6h/day, 5 days/week)	Mouse (male/female)	No effect		Experimental value
	NOEC	OECD 408	750 ppm	13 week(s)	Rat (male/female)	No effect		Experimental value

Judgement is based on the relevant ingredients

Conclusion CMR

Not classified for carcinogenicity
Not classified for mutagenic or genotoxic toxicity
Not classified for reprotoxic or developmental toxicity

Toxicity other effects

T-REX solvent based

No (test)data on the mixture available

acetone

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
			Skin	Skin dryness or cracking			Literature study

Chronic effects from short and long-term exposure

T-REX solvent based

No effects known.

SECTION 12: Ecological information

12.1. Toxicity

T-REX solvent based

No (test)data on the mixture available

acetone

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	EU Method C.1	5540 mg/l	96 h	Salmo gairdneri	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity invertebrates	LC50	Other	12600 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	EC50		> 7000 mg/l	96 h	Selenastrum capricornutum	Static system	Fresh water	Experimental value; Nominal concentration

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	11.4 mg/l WAF	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity invertebrates	EL50	OECD 202	3.0 mg/l WAF	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	OECD 201	30 mg/l WAF - 100 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
Long-term toxicity fish	NOELR		2.045 mg/l	28	Oncorhynchus mykiss		Fresh water	QSAR
Long-term toxicity aquatic invertebrates	NOEC	OECD 211	0.17 mg/l WAF	21 day(s)	Daphnia magna	Static system	Fresh water	Read-across
	LOEC	OECD 211	0.32 mg/l WAF	21 day(s)	Daphnia magna	Static system	Fresh water	Read-across
Toxicity aquatic micro-organisms	EL50		35.57 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR; Growth inhibition
	NOELR		7.959 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR; Growth inhibition

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	> 13.4 mg/l WAF	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity invertebrates	EL50	OECD 202	3.0 mg/l WAF	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EL50	OECD 201	29 mg/l WAF	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
Long-term toxicity fish	NOELR	Other	1.534 mg/l	28	Oncorhynchus mykiss		Fresh water	QSAR; Nominal concentration
Long-term toxicity aquatic invertebrates	NOEC	OECD 211	0.17 mg/l WAF	21 day(s)	Daphnia magna	Static system	Fresh water	Read-across; GLP
	EL50	OECD 211	1.6 mg/l WAF	21 day(s)	Daphnia magna	Static system	Fresh water	Read-across
Toxicity aquatic micro-organisms	EL50		26.81 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR; Growth rate

xylene

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	2.6 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Read-across; Lethal
Acute toxicity invertebrates	EC50		3.82 mg/l	48 h	Daphnia magna	Flow-through system	Fresh water	Read-across
Toxicity algae and other aquatic plants	EC50	OECD 201	4.36 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOEC		> 1.3 mg/l	56 day(s)	Oncorhynchus mykiss	Flow-through system	Fresh water	Experimental value; Lethal
Long-term toxicity aquatic invertebrates	NOEC	US EPA	1.17 mg/l	7 day(s)	Ceriodaphnia dubia		Fresh water	Read-across; Reproduction

ethylbenzene

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	4.2 mg/l	96 h	Salmo gairdneri	Semi-static system	Fresh water	Experimental value
Acute toxicity invertebrates	EC50	US EPA	1.8 mg/l - 2.4 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value
Toxicity algae and other aquatic plants	EC50	OECD 201	4.6 mg/l	72 h	Selenastrum capricornutum			Experimental value; Growth rate
Long-term toxicity fish	ChV	ECOSAR v1.00	1.13 mg/l	30 day(s)	Pisces			QSAR
Long-term toxicity aquatic invertebrates	NOEC	US EPA	1 mg/l	7 day(s)	Ceriodaphnia dubia	Semi-static system	Fresh water	Experimental value; Reproduction
Toxicity aquatic micro-organisms	EC50		96 mg/l	24 h	Nitrosomonas			Experimental value

	Parameter	Method	Value	Duration	Species	Value determination
Toxicity soil macro-organisms	LC50	OECD 207	0.042 mg/cm² - 0.053 mg/cm²	48 h	Eisenia fetida	Experimental value

Classification is based on the relevant ingredients

Conclusion

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

acetone

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B: CO2 Evolution Test	90.9 %	28 day(s)	Experimental value

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	98 %; GLP	28 day(s)	Experimental value

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	98 %; GLP	28 day(s)	Experimental value

xylene

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	87.8 %; GLP	28 day(s)	Read-across

ethylbenzene

Biodegradation water

Method	Value	Duration	Value determination
ISO 14593	70 % - 80 %; GLP	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
		500000 /cm³	

Half-life soil (t1/2 soil)

Method	Value	Primary degradation/mineralisation	Value determination
	3 day(s) - 10 day(s)		Literature study

Half-life air (t1/2 air)

Method	Value	Primary degradation/mineralisation	Value determination
	2.3 day(s)		

Conclusion

Contains readily biodegradable component(s)

12.3. Bioaccumulative potential

T-REX solvent based

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

acetone

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		0.69		Pisces	

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFWIN	3			Calculated value

Log Kow

Method	Remark	Value	Temperature	Value determination
		-0.24		Test data

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Log Kow

Method	Remark	Value	Temperature	Value determination
		> 3		

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Log Kow

Method	Remark	Value	Temperature	Value determination
		> 3		

xylene

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		7 - 26	8 week(s)	Oncorhynchus mykiss	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
		3.2	20 °C	Conclusion by analogy

ethylbenzene

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	Other	1	6 week(s)	Oncorhynchus kisutch	Literature study
		15 - 79		Carassius auratus	Literature study

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF		4.68		Lamellibranchiata	Literature study

Log Kow

Method	Remark	Value	Temperature	Value determination
EU Method A.8		3.6	20 °C	Experimental value

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	98 %	0 %	0.9 %	0 %	1.3 %	Calculated value

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	96 %	0 %	1.8 %	0.55 %	1.4 %	Calculated value

ethylbenzene

(log) Koc

Parameter	Method	Value	Value determination
log Koc	PCKOCWIN v1.66	2.71	Calculated value

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
0.00843 atm m³/mol		25 °C		Experimental value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level I	99.45 %		0.05 %	0.05 %	0.45 %	QSAR

Conclusion

Contains component(s) with potential for mobility in the soil

12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6. Other adverse effects

T-REX solvent based

Global warming potential (GWP)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

acetone

Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

xylene

Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ground water

Ground water pollutant

ethylbenzene

Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).
15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR)

14.1. UN number

UN number	1133

14.2. UN proper shipping name

Proper shipping name	Adhesives

14.3. Transport hazard class(es)

Hazard identification number	
Class	3
Classification code	F1

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
Specific mention	Viscous liquid with a flash point lower than 23°C, which meets the conditions indicated in 2.2.3.1.4 of ADR

Rail (RID)

14.1. UN number

UN number	1133

14.2. UN proper shipping name

Proper shipping name	Adhesives

14.3. Transport hazard class(es)

Hazard identification number	33
Class	3
Classification code	F1

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
Specific mention	Viscous liquid with a flash point lower than 23°C, which meets the conditions indicated in 2.2.3.1.4 of RID

Inland waterways (ADN)

14.1. UN number

UN number	1133

14.2. UN proper shipping name

Proper shipping name	Adhesives

14.3. Transport hazard class(es)

Class	3
Classification code	F1

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
Specific mention	Viscous liquid with a flash point lower than 23°C, which meets the conditions indicated in 2.2.3.1.4 of ADN

Sea (IMDG/IMSBC)

14.1. UN number

UN number	1133

14.2. UN proper shipping name

Proper shipping name	Adhesives

14.3. Transport hazard class(es)

Class	3

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Marine pollutant	-
Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	223
Special provisions	955
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
Specific mention	Viscous liquid with a flash point lower than 23°C, which meets the conditions indicated in 2.3.2.3 of IMDG

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

Annex II of MARPOL 73/78	Not applicable, based on available data

Air (ICAO-TI/IATA-DGR)

14.1. UN number

UN number	1133

14.2. UN proper shipping name

Proper shipping name	Adhesives

14.3. Transport hazard class(es)

Class	3

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	A3
Passenger and cargo transport: limited quantities: maximum net quantity per packaging	10 L
Specific mention	Viscous liquid with a flash point lower than 23°C, which meets the conditions indicated in 3.3.3.1 of ICAO

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
26.6 %	
361.76 g/l	

Indicative occupational exposure limit values (Directive 98/24/EC, 2000/39/EC and 2009/161/EU)

Product name	Skin resorption
Xylene, mixed isomers, pure	Skin
Ethylbenzene	Skin

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
· acetone · hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane · hydrocarbons, C7, n-alkanes, isoalkanes, cyclics · xylene · ethylbenzene	Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects,2. Articles not complying with paragraph 1 shall not be placed on the market.3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with R65 or H304,4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: “Keep lamps filled with this liquid out of the reach of children”; and, by 1 December 2010, “Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life- threatening lung damage”; b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: “Just a sip of grill lighter may lead to life threatening lung damage”; c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.’
· acetone · hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane · hydrocarbons, C7, n-alkanes, isoalkanes, cyclics · xylene · ethylbenzene	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.	1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: — metallic glitter intended mainly for decoration, — artificial snow and frost, — “whoopee” cushions, — silly string aerosols, — imitation excrement, — horns for parties, — decorative flakes and foams, — artificial cobwebs, — stink bombs.2. Without prejudice to the application of other Community provisions on

		the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: "For professional users only".3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC.4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

National legislation The Netherlands

T-REX solvent based

Waste identification (the Netherlands)	LWCA (the Netherlands): KGA category 03
Waterbezwaarlijkheid	1

xylene

SZW - List of reprotoxic substances (development)	Possibly hazardous to the foetus

National legislation Germany

T-REX solvent based

WGK	2; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4)

acetone

Schwangerschaft Gruppe	D
MAK 8-Stunden-Mittelwert ppm	Aceton; 500 ppm
MAK 8-Stunden-Mittelwert mg/m³	Aceton; 1200 mg/m³
TA-Luft	5.2.5

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

TA-Luft	5.2.5; I

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

TA-Luft	5.2.5; I

xylene

Schwangerschaft Gruppe	D
MAK 8-Stunden-Mittelwert ppm	Xylol (alle Isomeren); 100 ppm
MAK 8-Stunden-Mittelwert mg/m³	Xylol (alle Isomeren); 440 mg/m³
TA-Luft	5.2.5; I

ethylbenzene

MAK - Krebserzeugend Kategorie	4
Schwangerschaft Gruppe	C
MAK 8-Stunden-Mittelwert ppm	Ethylbenzol; 20 ppm
MAK 8-Stunden-Mittelwert mg/m³	Ethylbenzol; 88 mg/m³
TA-Luft	5.2.5; I

National legislation France

T-REX solvent based

No data available

National legislation Belgium

T-REX solvent based

No data available

Other relevant data

T-REX solvent based

No data available

acetone

TLV - Carcinogen	Acetone; A4

xylene

TLV - Carcinogen	Xylene (all isomers); A4
IARC - classification	3; Xylenes

ethylbenzene

TLV - Carcinogen	Ethyl benzene; A3
IARC - classification	2B; Ethylbenzene

15.2. Chemical safety assessment

No chemical safety assessment is required.

SECTION 16: Other information

Full text of any H-statements referred to under headings 2 and 3:

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs (ears (hearing damage)) through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
(*) = INTERNAL CLASSIFICATION BY BIG
PBT-substances = persistent, bioaccumulative and toxic substances
CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

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