SAFETY DATA SHEET

Based upon Regulation (EC) No. 1907/2006, as amended by Regulation (EC) No. 453/2010

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

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:

2.1.1 Classification according to Regulation EC No 1272/2008

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.
Skin Irrit.	category 2	H315: Causes skin irritation.
Aquatic Chronic	category 3	H412: Harmful to aquatic life with long lasting effects.

2.1.2 Classification according to Directive 67/548/EEC-1999/45/EC

Classified as dangerous in accordance with the criteria of Directives 67/548/EEC and 1999/45/EC

F; R11 - Highly flammable.

R67 - Vapours may cause drowsiness and dizziness.

R52-53 - Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

2.2 Label elements:

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

Classification and labelling according to the criteria of Regulation (EU) No 487/2013, 4th adaptation of Regulation (EC) No 1272/2008 and after evaluation of available test data


Signal word Danger

H-statements

H225	Highly flammable liquid and vapour.
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 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.
P403 + P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

Labelling according to Directive 67/548/EEC-1999/45/EC (DSD/DPD)

Labels

Highly flammable

R-phrases

52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
67	Vapours may cause drowsiness and dizziness

S-phrases

(02)	(Keep out of the reach of children)
16	Keep away from sources of ignition - No smoking
(46)	(If swallowed, seek medical advice immediately and show this container or label)
61	Avoid release to the environment. Refer to special instructions/safety data sheets.

2.3 Other hazards:

CLP

May be ignited by sparks
Gas/vapour spreads at floor level: ignition hazard
Slightly irritant to eyes
Caution! Substance is absorbed through the skin

DSD/DPD

May be ignited by sparks
Gas/vapour spreads at floor level: ignition hazard
Slightly irritant to eyes
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 DSD/DPD	Classification according to CLP	Note	Remark
hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane (01-2119475514-35)		2.5%<C<10%	F; R11 Xn; R65 Xi; R38 R67 N; R51-53	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 (01-2119475514-33)		2.5%<C<10%	F; R11 Xn; R65 Xi; R38 R67 N; R51-53	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<12.5%	Xn; R20/21 Xi; R38 R10	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315	(1)(2)(8)(10)	Constituent
ethylbenzene (-)	100-41-4 202-849-4	1%<C<10%	F; R11 Xn; R20	Flam. Liq. 2; H225 Acute Tox. 4; H332	(1)(2)(10)	Constituent
acetone (01-2119471330-49)	67-64-1 200-662-2	1%<C<10%	F; R11 Xi; R36 R66 R67	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent

(1) For R-phrases and H-statements in full: see heading 16
(2) Substance with a Community workplace exposure limit
(8) Specific concentration limits, see heading 16
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

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 (15 minutes)/shower. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse with 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 unwell.

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. ON CONTINUOUS EXPOSURE/CONTACT: Dry skin. Cracking of the skin.

After eye contact:

Slight irritation.

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 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 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. 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. 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. Insufficient ventilation: use spark-/explosionproof appliances and lighting system.

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

EU

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

Belgium

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

USA (TLV-ACGIH)

Acetone	Short time value	750 ppm	TLV - Adopted Value
	Time-weighted average exposure limit 8 h	500 ppm	TLV - Adopted Value
Ethyl benzene	Time-weighted average exposure limit 8 h	20 ppm	TLV - Adopted Value
Xylene (all isomers)	Short time value	150 ppm	TLV - Adopted Value
	Time-weighted average exposure limit 8 h	100 ppm	TLV - Adopted Value

Germany

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

France

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

UK

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

Xylene, o-,m-,p- or mixed isomers	Time-weighted average exposure limit 8 h	50 ppm 220 mg/m³	Workplace exposure limit (EH40/2005)

b) National biological limit values

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

8.1.2 Sampling methods

Product name	Test	Number
Acetone	OSHA	69
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
Ethyl Benzene	OSHA	7
Ethyl Benzene (Hydrocarbons, Aromatic)	NIOSH	1501
No data available		
Petroleum Distillate (Naphthas)	NIOSH	1550
Petroleum Distillates fractions	OSHA	48
Xylene (Hydrocarbons, aromatic)	NIOSH	1501
Xylene (o-, m-, & p-isomers)	OSHA	7
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 - Workers

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
		2085 mg/m³	
DNEL	Long-term systemic effects dermal	300 mg/kg bw/day	

xylene

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

ethylbenzene

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

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	

DNEL - General population

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 local 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	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 inhalation	14.8 mg/m³	
	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	

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	

PNEC

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	
Soil	2.68 mg/kg soil dw	
Oral	0.02 g/kg food	

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	

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. 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
Vapour pressure	< 1100 hPa ; 50 °C
Relative vapour density	> 1
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

Physical hazards

No physical hazard class

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. No data available.

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.

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

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

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination
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	Gender	Value determination
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	Read-across
Inhalation (vapours)	LC50	Equivalent to OECD 403	>23.3 mg/l	4 h	Rat	Male/female	Read-across

xylene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination
Oral	LD50	OECD 401	5627 mg/kg bw		Mouse	Male	Experimental value
Dermal	LD50	OECD 402	>4200 mg/kg bw	4 h	Rabbit	Male	Experimental value
Inhalation	LC50	OECD 403	27.57 mg/l	4 h	Rat	Male	Experimental value

ethylbenzene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination
Oral (one dose)	LD50		3500 mg/kg		Rat	Male/female	Experimental value
Dermal	LD50	Other	15432 mg/kg	24 h	Rabbit	Male	Experimental value
Inhalation	LC50	Other	4000 ppm	4 h	Rat	Male	Literature study

acetone

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination
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
Inhalation (vapours)	LC50	Other	76 mg/l	4 h	Rat	Female	Experimental value
Inhalation (vapours)	LCL0	Other	16000 ppm	4 h	Rat		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

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

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination
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
Eye	Not irritating	Other			Rabbit	Read-across
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
Eye	Moderately irritating	OECD 405		24; 48; 72 hours	Rabbit	Experimental value
Skin	Irritating	OECD 404	24 h	24; 72 hours	Rabbit	Experimental value

ethylbenzene

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

acetone

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

Classification is based on the relevant ingredients

Conclusion

Causes skin irritation.

Respiratory or skin sensitisation

T-REX solvent based

No (test)data on the mixture available

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

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

ethylbenzene

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

acetone

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Gender	Value determination
Skin	Not sensitizing	Human observation			Human		Literature

Judgement is based on the relevant ingredients

Conclusion

Not sensitizing for skin

Specific target organ toxicity

T-REX solvent based

No (test)data on the mixture available

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

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Gender	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	Gender	Value determination
Inhalation (vapours)	NOAEC	Other	12470 mg/m³ air	Central nervous system	No effect	16 weeks (daily)	Rat	Male	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	Gender	Value determination
Oral	LOAEL	Equivalent to OECD 408	150 mg/kg bw/day	Liver	Weight gain	90 day(s)	Rat	Male/female	Experimental value
Inhalation (vapours)	NOAEC		>=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	Gender	Value determination
Oral	NOAEL	OECD 407	75 mg/kg bw/day		No effect	28 day(s)	Rat	Male/female	Experimental value
Oral	NOAEL	OECD 408	75 mg/kg bw/day		No effect	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	NOAEL	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

acetone

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Gender	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 judgement
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

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

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		No effect	Read-across

xylene

Result	Method	Test substrate	Effect	Value determination
Negative	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

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

Mutagenicity (in vivo)

T-REX solvent based

No (test)data on the mixture available

xylene

Result	Method	Exposure time	Test substrate	Gender	Organ	Value determination
Negative	Equivalent to OECD 478		Mouse	Male/female		Experimental value

ethylbenzene

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

acetone

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

Carcinogenicity

T-REX solvent based

No (test)data on the mixture available

xylene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination	Organ	Effect
Oral	NOAEC	Other	>=500 mg/kg bw/day	103 weeks (5 days/week)	Rat	Male/female	Experimental value		No effect

ethylbenzene

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

acetone

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

Reproductive toxicity

T-REX solvent based

No (test)data on the mixture available

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

	Parameter	Method	Value	Exposure time	Species	Gender	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	Gender	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

xylene

	Parameter	Method	Value	Exposure time	Species	Gender	Effect	Organ	Value determination
Developmental toxicity	NOAEC (P)	Equivalent to OECD 414	>=500 ppm	21 days (6h/day)	Rat	Male/female	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
	NOAEC (F2)	EPA OPPTS 870.3800	>=500 ppm		Rat	Male/female	No effect		Experimental value

ethylbenzene

	Parameter	Method	Value	Exposure time	Species	Gender	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

acetone

	Parameter	Method	Value	Exposure time	Species	Gender	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

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	Gender	Value determination
			Skin	Skin dryness or cracking				Literature study

Chronic effects from short and long-term exposure

No effects known.

SECTION 12: Ecological information

12.1 Toxicity:

T-REX solvent based

No (test)data on the mixture available

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	LC50	OECD 203	11.4 mg/l WAF	96 h	Oncorhynchus mykiss	Semi-static	Fresh water	Experimental value; GLP
Acute toxicity invertebrates	EC50	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 - 100 mg/l WAF	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
Long-term toxicity fish	NOEL		2.045 mg/l	28	Oncorhynchus mykiss		Fresh water	QSAR
Long-term toxicity aquatic invertebrates	NOEC		0.17 mg/l	21 day(s)	Daphnia magna			Literature
	LOEC		0.32 mg/l	21 day(s)	Daphnia magna			Literature
Toxicity aquatic micro-organisms	EC50		35.57 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR; Growth rate

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	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 - 100 mg/l WAF	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
	ErC50	OECD 201	13 mg/l WAF	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Read-across; GLP
Long-term toxicity fish	NOELR		1.534 mg/l	28	Oncorhynchus mykiss		Fresh water	QSAR
Long-term toxicity aquatic invertebrates	NOEC		0.17 mg/l	21 day(s)	Daphnia magna			Literature
	LOEC		0.32 mg/l	21 day(s)	Daphnia magna			Literature
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	73 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 (Oncorhynchus mykiss)	Semi-static	Fresh water	Experimental value
Acute toxicity invertebrates	EC50	US EPA	1.8 - 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 aquatic invertebrates	NOEC	US EPA	1 mg/l	7 day(s)	Ceriodaphnia dubia	Semi-static	Fresh water	Experimental value; Reproduction

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 (Oncorhynchus mykiss)	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

Classification of the mixture is based on the relevant ingredients and on application of the summation method

Conclusion

Harmful to aquatic organisms

May cause long-term adverse effects in the aquatic environment

12.2 Persistence and degradability:

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

Biodegradation water

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

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Biodegradation water

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

xylene

Biodegradation water

Method	Value	Duration	Value determination
OECD 301: Ready Biodegradability	100 %	12 day(s)	Experimental value
OECD 301F: Manometric Respirometry Test	87.8 %	28 day(s)	Read-across

ethylbenzene

Biodegradation water

Method	Value	Duration	Value determination
OECD 301C: Modified MITI Test (I)	> = 81 %	= 14 day(s)	Experimental value
ISO 14593	70 - 80 %	28 day(s)	Experimental value

Half-life soil (t1/2 soil)

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

acetone

Biodegradation water

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

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)			

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
		3.15		Experimental value
EU Method A.8		3.6	20 °C	Experimental value

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

Conclusion

No straightforward conclusion can be drawn based upon the available numerical values

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
Koc	PCKOCWIN v1.66	517.8	Calculated value

Conclusion

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

12.5 Results of PBT and vPvB assessment:

Due to insufficient data no statement can be made whether the component(s) fulfil(s) the criteria of PBT and vPvB according to 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 substances which may contribute to the greenhouse effect (Regulation (EC) No 842/2006)

Ozone-depleting potential (ODP)

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

xylene

Ground water

Ground water pollutant

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

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).
08 04 09* (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants containing organic solvents or other dangerous substances). Depending on branch of industry and production process, also other waste codes may be applicable. Hazardous waste according to Directive 2008/98/EC.

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	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	640H
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	640H
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	640H

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 73/78 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:

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
· hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane · hydrocarbons, C7, n-alkanes, isoalkanes, cyclics · xylene · ethylbenzene · acetone	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	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

	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.	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.'
· hydrocarbons, C7, n-alkanes, isoalkanes, cyclics · xylene · ethylbenzene · acetone	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.

Reference legislation

See column 1: 3.

See column 1: 40.

Volatile organic compounds (VOC)

27 %

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)

xylene

TA-Luft	TA-Luft Klasse 5.2.5/I
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

ethylbenzene

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

acetone

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

National legislation France

T-REX solvent based

No data available

National legislation Belgium

T-REX solvent based

No data available

15.2 Chemical safety assessment:

No chemical safety assessment is required.

SECTION 16: Other information

Information based on classification according to CLP

Full text of any R-phrases referred to under headings 2 and 3:

R10 Flammable
R20 Harmful by inhalation
R20/21 Harmful by inhalation and in contact with skin
R36 Irritating to eyes
R38 Irritating to skin
R51 Toxic to aquatic organisms
R52 Harmful to aquatic organisms
R53 May cause long-term adverse effects in the aquatic environment
R65 Harmful: may cause lung damage if swallowed
R66 Repeated exposure may cause skin dryness or cracking
R67 Vapours may cause drowsiness and dizziness

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.
H336 May cause drowsiness or dizziness.
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

DSD Dangerous Substance Directive
DPD Dangerous Preparation Directive
CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

Specific concentration limits DSD

xylene	C ≥ 12,5 %	Xn; R20/21	Annex VI

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee

SOUDAL

Technical Data Sheet

T-REX SOLVENT BASED

Technical data:

Base	Synthetic rubber
Consistency	Paste
Curing System	Physical drying and crystallization
Specific Gravity	Ca. 1.35 g/cm³
Temperature resistance	-20°C until +70°C
Open Time (*)	5 min.
Initial grab	At least 125kg/m²
End strength wood-wood	Ca. 13 kg/cm²
End strength wood- aluminium	Ca. 13 kg/cm²
End strength wood- PVC	Ca. 12 kg/cm²
Application Temperature	+5°C until +30°C

* This varies according to ambient conditions such as temperature, humidity, substrate etc.

Product:
T-Rex Solvent based is a fibre reinforced high strength construction adhesive with high initial grab (over 125kg/m²) and high bond strength.
Compatible with most building materials (porous and non-porous).

Characteristics:
- Fibre reinforced
- Excellent initial grab (at least 125kg/m², full surface bonding) for fast and direct bonding
- Very fast powerful bonding
- Direct application onto one substrate
- Replaces nails and screws
- Suitable for bonding on uneven surfaces
- Excellent adhesion on a wide range of construction materials both in interior and exterior applications

Applications:
- Suitable for the bonding of decorative materials, skirting boards, gypsum panels in vertical, horizontal and overhead applications.
- Bonding of carpet grippers, edge strips and aluminium and uPVC stair nosing
- Bonding of wall and floor boards, window frames and partitions
- Suitable for direct bonding of many materials such as wood, many plastics, bricks, stone, tiles, metal to porous surfaces such as concrete, plaster, MDF, OSB, timber panels, chipboard etc.

Packaging:
Colour: beige/brown
Packaging: Cartridge xxx gr

Surfaces:
Type: All substrates except PE,PP and bituminous surfaces.
State of Surface: The substrates should be dry, clean and free of dust, grease and loose particles. Porous surfaces such as plaster and fibre cement board should be primed.
We recommend a preliminary compatibility test.

Applying the adhesive:
Method: Apply the adhesive by means of a caulking gun onto one surface in strips or dabs. Always apply adhesive to the edges and corners of panels. Press the surfaces together immediately and tamp down with a rubber hammer. Support may be required on a vertical fixing or for heavy components.
For the bonding of impervious or heavy materials use the transfer method: press components together and release for max. 5 min. Return parts together and batten down with a rubber hammer. If necessary support until adhesive is completely cured (approx. 24-48 hours).The bond can be loaded after 24-48 hours
Application temperature: +5°C to +35°C
Clean: Soudal Adhesive Cleaner 90A, mechanically if cured
Repair: with same material

SOUDAL

Technical Data Sheet

T-REX SOLVENT BASED

Shelf-life:
At least 12 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +25°C.

Health- and safety recommendations:
Apply the usual industrial hygiene. Work in a well-ventilated place. Do not smoke. If the area is not sufficiently ventilated, wear breathing equipment. Consult the label for more information.

Remarks:
- When bonding, the pressure applied determines the initial grab and the final bonding strength. The duration during which pressure is applied is less important.
- In case of overhead applications a combination with mechanical fixing is required.
- Do not use as a mirror adhesive.
- Do not use in applications where continuous immersion is possible.

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