

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier:

Product name: BLUESIL RES 991

Product No.: PRCO90012887

UFI: QMA4-90CF-E00H-DSJX

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

Identified uses: Isolation of electrical or electronic material.

Uses advised against: None known.

1.3 Details of the supplier of the safety data sheet:

Manufacturer:

Elkem Silicones France SAS
1-55 avenue des Frères Perret
F-69192 SAINT FONS Cedex
FRANCE

Telephone: +33 (0) 4 72 73 74 75

Fax: +33 (0) 4 72 73 75 99

E-mail: fds.sil@elkem.com

Supplier:

Elkem Silicones Germany GmbH
Borsigstraße 1
D-51381 Leverkusen
GERMANY

Telephone: +49 (0) 2171 913 49-0

Fax: +49 (0) 2171 913 49-10

1.4 Emergency telephone number: CHEMTREC Switzerland (24h/24): +41 435082011 / National Poison Centre: 145

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

The product has been classified according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Physical Hazards:

Flammable liquids	Category 3	H226: Flammable liquid and vapor.
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Health Hazards:

Skin irritation	Category 2	H315: Causes skin irritation.
Serious eye irritation	Category 2	H319: Causes serious eye irritation.
Specific Target Organ Toxicity - Single Exposure	Category 3	H335: May cause respiratory irritation.
Specific Target Organ Toxicity - Single Exposure	Category 3	H336: May cause drowsiness or dizziness.
Specific Target Organ Toxicity - Repeated Exposure	Category 2	H373: May cause damage to organs through prolonged or repeated exposure.

Environmental Hazards:

Chronic hazards to the aquatic environment

Category 3

H412: Harmful to aquatic life with long lasting effects.

2.2 Label Elements:

Contains:

reaction mass of ethylbenzene and xylene

Hazard pictograms:



Signal Word:

Warning

Hazard statements:

H226: Flammable liquid and vapor.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.
H373: May cause damage to organs through prolonged or repeated exposure.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements:

Prevention:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312: Call a POISON CENTER or doctor/ physician if you feel unwell.

UFI:

QMA4-90CF-E00H-DSJX

2.3 Other hazards:

Physical Hazards:

Flammable liquid and vapor.

Health Hazards:

Inhalation:

May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.

Eye Contact:

Causes serious eye irritation.

Skin Contact:

Causes skin irritation.

Ingestion:

No specific symptoms noted.

Other Health Effects:

No other information noted.

Environmental Hazards:

Harmful to aquatic life with long lasting effects.

Results of PBT and vPvB assessment:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Endocrine Disruption - Health: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Endocrine Disruption - Environment: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other hazards: No other information noted.

SECTION 3: Composition/information on ingredients

3.2 Mixtures:

General information:

Solution of polyorganosiloxane resin.

Hazardous Component(s):

Chemical name	Concentration*	Type	CAS-No.	EC No.	REACH Registration No.	Notes
reaction mass of ethylbenzene and xylene	25 - <50%	Component	None.	905-588-0	01-2119488216-32-XXXX	# UVCB

The multi-constituent substance/UVCB contained in this mixture is composed of the following hazardous ingredients:

Chemical name	Concentration*	CAS-No.	EC No.	Notes
xylene	25 - <50%	1330-20-7	215-535-7	#
ethylbenzene	5 - <10%	100-41-4	202-849-4	#
toluene	0,1 - <1%	108-88-3	203-625-9	#

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

SVHC: Listed on the Candidate List of substances of very high concern (SVHC)

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

ED: Endocrine Disruptor

UVCB: Unknown or Variable composition, Complex reaction products or Biological materials

Classification:

Chemical name	Classification	Specific concentration limit: / ATE / M-Factor:	Notes
reaction mass of ethylbenzene and xylene	Flam. Liq. 3 H226; Acute Tox. 4 H312; Acute Tox. 4 H332; Skin Irrit. 2 H315; Eye Irrit. 2 H319; STOT SE 3 H335; STOT RE 2 H373; Asp. Tox. 1 H304; STOT SE 3 H336; Aquatic Chronic 3 H412;		
xylene	Flam. Liq. 3 H226; Skin Irrit. 2 H315; Acute Tox. 4 H332; Acute Tox. 4 H312; Eye Irrit. 2 H319; STOT SE 3 H335; STOT RE 2 H373; Asp. Tox. 1 H304; Aquatic Chronic 3 H412;		
ethylbenzene	Flam. Liq. 2 H225; Acute Tox. 4 H332; STOT RE 2 H373; Asp. Tox. 1 H304; Aquatic Chronic 3 H412;		
toluene	Flam. Liq. 2 H225; Repr. 2 H361d;		

	Asp. Tox. 1 H304; STOT RE 2 H373; Skin Irrit. 2 H315; STOT SE 3 H336; Aquatic Chronic 3 H412;		
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The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information:

Move into fresh air and keep at rest. Take off contaminated clothing and wash it before reuse. Get medical attention immediately.

4.1 Description of first aid measures:

Inhalation:

In case of inhalation: Move person into fresh air and keep at rest. Get medical attention immediately. If breathing is difficult, trained personnel should give oxygen. If breathing stops, provide artificial respiration.

Skin Contact:

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin with soap and water. Get medical attention immediately. Contaminated clothing to be placed in closed container until disposal or decontamination. Wash contaminated clothing before reuse.

Eye Contact:

In the event of contact with the eyes, rinse thoroughly with clean water for at least 15 minutes. Remove any contact lenses after the initial 1-2 minutes of flushing and after advice from the attending physician. Continue flushing for several additional minutes. Open eyes wide apart. Get medical attention immediately, preferably an ophthalmologist.

Ingestion:

Do not induce vomiting. Rinse mouth thoroughly with water. Do not give victim anything to drink if he is unconscious. Get medical attention immediately. Immediately call a POISON CENTER/doctor.

Personal Protection for First-aid Responders:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). Refer to sections 5 and 8 for information on emergency procedures and protective equipment.

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

Any important symptoms and effects are described in Section 11 (Toxicological information) of this SDS. Due to the irritant properties of this product, ingestion may lead to burning or ulcers in the mouth, stomach and gastrointestinal tract, followed by stenosis. Most important symptoms/effects: Respiratory discomfort, Burning, Itching.

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

Notes to the physician:

No specific recommendations. Show this Safety Data Sheet to the attending physician.

SECTION 5: Firefighting measures

General Fire Hazards:

Material whose physical characteristics induce a risk of fire in contact with a source of ignition. Vapors may travel considerable distance to a source of ignition and flash back. Containers may explode (due to the build-up of pressure) when exposed to extreme heat.

5.1 Extinguishing media:

Suitable extinguishing media:

Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media:

Avoid water in straight hose stream; will scatter and spread fire.

5.2 Special hazards arising from the substance or mixture:

Product will burn under fire conditions. Thermal decomposition or combustion may liberate carbon oxides, silicon oxides and other toxic gases or vapors.

5.3 Advice for firefighters:

Special fire-fighting procedures:

Use standard firefighting procedures and consider the hazards of other involved materials. Remove undamaged containers from fire area if it is safe to do so. Evacuate to a safe location and contact the emergency services. Water spray should be used to cool containers.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Special protective equipment for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Personnel not required or not equipped with personal protection should be evacuated from the area. Caution: Contaminated surfaces may be slippery. Follow safe handling advice and personal protective equipment recommendations. Avoid contact with eyes, skin, and clothing. Provide good ventilation. Avoid inhalation of vapors, mists or dusts. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all possible sources of ignition in the surrounding area. Avoid sparks, flames, heat and smoking. Prevent further leakage or spillage if safe to do so. Alert the Health, Safety & Environmental department of spill.

6.2 Environmental precautions:

Do not release into the environment. Do not discharge into drains, water courses or onto the ground. Collect spillage. Use containment for a large spill. Notify relevant authorities if this material is released to the environment.

6.3 Methods and material for containment and cleaning up:

Access to contaminated area only to authorized people. Absorb with sand or other inert absorbent. Shovel up and place in a container for salvage or disposal. Use clean non-sparking tools to collect absorbed material. Use explosion proof electric equipment. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Never return the spilled product to its original container for reuse. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Container must be kept tightly closed. To clean the floor and all objects contaminated by this material, use an appropriate solvent (see § 9). Flush area with plenty of water. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labeled container. Dispose of residue in accordance with regulations in force.

6.4 Reference to other sections:

Please observe the important information mentioned in the other sections. In particular, information on exposure controls/personal protection and disposal considerations can be found under sections 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Precautions:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. In partly emptied containers formation of explosive mixture is possible. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Use spark-proof tools and/or explosion-proof equipment. Avoid inhalation of vapors/aerosols/dusts and contact with skin and eyes. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. If ventilation is insufficient, suitable respiratory protection must be provided. See Section 8 of the SDS for Personal Protective Equipment. Provide eyewash station and safety shower and ensure that their location are labelled conspicuously. Limit the quantities of product in the work area to those which are necessary for the work in hand. Handle in accordance with good industrial hygiene and safety practices. Handle and open container with care. Keep container tightly closed. Protect from contamination. Do not mix with incompatible materials. For further information, refer to section 10: "Stability and Reactivity". Take care to prevent spills, waste and minimize release to the environment. In case of spills, beware of slippery floors and surfaces.

Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

7.2 Conditions for safe storage, including any incompatibilities:

Store in accordance with local/regional/national regulations. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures. For further information, refer to section 10: "Stability and Reactivity". Store in original tightly closed container. Keep in properly labelled containers. Nitrogen blanketing of containers is recommended. Provide electrical earthing of equipment and electrical equipment usable in explosive atmospheres. Take action to prevent static discharges. Keep above the chemical's freezing point. Protect against physical damage and/or friction. Avoid discharge into drains, water courses or onto the ground. Provide a retention tank. Provide impermeable soil.

Packaging frequently used at our sites:

Steel drums coated with epoxy-resin.

7.3 Specific end use(s):

No specific recommendations. See the technical data sheet on this product for further information.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters:

Occupational Exposure Limits:

xylene

Type	Exposure Limit Values		Source	Date	Remarks
STEL	100 ppm	442 mg/m3	EU ELV	12 2009	Indicative
TWA	50 ppm	221 mg/m3	EU ELV	12 2009	Indicative
SKIN DES	-	-	EU ELV	02 2017	Can be absorbed through the skin.
SKIN DES	-	-	SUVA	08 2023	Can be absorbed through the skin.
STEL	100 ppm	440 mg/m3	SUVA	08 2023	
TWA	50 ppm	220 mg/m3	SUVA	08 2023	

ethylbenzene

Type	Exposure Limit Values		Source	Date	Remarks
SKIN DES	-	-	EU ELV	02 2017	Can be absorbed through the skin.
TWA	100 ppm	442 mg/m3	EU ELV	12 2009	Indicative
STEL	200 ppm	884 mg/m3	EU ELV	12 2009	Indicative
SKIN DES	-	-	SUVA	08 2023	Can be absorbed through the skin.
TWA	50 ppm	220 mg/m3	SUVA	08 2023	
STEL	50 ppm	220 mg/m3	SUVA	08 2023	

toluene

Type	Exposure Limit Values	Source	Date	Remarks
TWA	50 ppm 190 mg/m3	SUVA	01 2021	
SKIN DES	- -	EU ELV	02 2017	Can be absorbed through the skin.
SKIN DES	- -	SUVA	01 2021	Can be absorbed through the skin.
STEL	200 ppm 760 mg/m3	SUVA	01 2021	
TWA	50 ppm 192 mg/m3	EU ELV	12 2009	Indicative
STEL	100 ppm 384 mg/m3	EU ELV	12 2009	Indicative

Biological Limit Values:

xylene

Exposure Limit Values	Type	Source	Date
2 g/l (Urine)	Methylhippuric acids (Sampling time: End of exposure / end of shift.)	CH BAT	01 2018

ethylbenzene

Exposure Limit Values	Type	Source	Date
600 mg/g (Creatinine in urine)	Mandelic acid plus phenylglyoxylic acid (Sampling time: End of exposure / end of shift.)	CH BAT	01 2018

toluene

Exposure Limit Values	Type	Source	Date
75 µg/l (Urine)	Toluene (Sampling time: End of exposure / end of shift.)	CH BAT	01 2021
600 µg/l (Blood)	Toluene (Sampling time: End of exposure / end of shift.)	CH BAT	2013
2 g/g (Creatinine in urine)	Hippuric acid (Sampling time: c) Long term exposure after several (4-5) work shifts. b) End of exposure / end of shift.)	CH BAT	2013
0,5 mg/l (Urine)	o-Cresol (Sampling time: b) End of exposure / end of shift. c) Long term exposure after several (4-5) work shifts.)	CH BAT	2013

DNEL-Values:

reaction mass of ethylbenzene and xylene

Type	Route of Exposure	DNEL-Values	Remarks
Workers ; Systemic, long-term	Inhalation	77 mg/m3	
Workers ; Local, short-term	Inhalation	293 mg/m3	
Workers ; Systemic, long-term	Dermal	180 mg/kg	
General population ; Systemic, long-term	Inhalation	15 mg/m3	
General population ; Systemic, long-term	Oral	1,6 mg/kg	

PNEC-Values:

reaction mass of ethylbenzene and xylene

Environmental compartment	PNEC-Values	Remarks
Freshwater	0,044 mg/l	
Marine water	0,004 mg/l	
Sewage treatment plant	1,6 mg/l	
Freshwater sediment	2,52 mg/kg	
Marine sediment	0,252 mg/kg	
soil	0,852 mg/kg	

Monitoring methods:

Ensure workers' exposure monitoring in accordance with national and European regulations in force, in particular Directives 98/24/EC and 2004/37/EC.

8.2 Exposure controls:

Appropriate Engineering Controls:

Use engineering controls to reduce air contamination to permissible exposure level. The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Engineering controls are always preferable to personal protective equipment. Control measures to consider: Provide adequate ventilation. In case of inadequate ventilation: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower. Use explosion-proof ventilation equipment.

Individual protection measures, such as personal protective equipment (PPE):

Avoid inhalation of vapors/aerosols/dusts and contact with skin and eyes. Personal protective equipment should be chosen according to applicable standards, adapted to the conditions of use of the product and in discussion with the supplier of the personal protective equipment.

Eyeface protection:

Safety goggles.
Use face shield in case of splash risk.

Hand Protection:

This recommendation is valid only for the product named in this safety data sheet supplied by us, and only for the indicated intended use purposes. In case this product will be mixed with other substances, you need to contact a supplier of CE approved protective gloves in order to determine the appropriate gloves.

Prolonged or repeated contact:

Material: Nitrile.

Glove thickness: 1,25 mm

Guideline: EN374-3

Additional Information: Gloves commonly used in Elkem's facilities.

Short contact:

Material: Nitrile / Neoprene

Glove thickness: 0,198 mm

Guideline: EN374-3

Additional Information: Gloves commonly used in Elkem's labs.

Skin and Body Protection:

Wear appropriate clothing to prevent any possibility of skin contact. Isolate contaminated clothing and wash before reuse. In case of splashes: Wear apron or special protective clothing.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use the following CE approved air-purifying respirator: Breathing apparatus with combined filter type ABEK. Wear respiratory protection with combination filter (dust and gas filter) during operations leading to the formation of dust/aerosols.

Environmental Controls:

See sections 7 and 13 of the Safety Data Sheet.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties:****Appearance:**

Physical state:	Liquid
Form:	Viscous
Color:	Straw yellow
Odor:	Very strong
pH:	By definition, pH measurement consists in the determination of hydrogen ions concentration in solution, generally aqueous. Silicones products are hydrophobic and therefore, not soluble in water. By consequence, it is not possible to measure the pH value.
Melting point/freezing point:	No data available.
Boiling Point:	137 - 142 °C
Flash Point:	25 °C (Closed cup according to method Afnor T 60103.)
Flammability:	No data available.
Flammability Limit - Upper (%):	7 %(V) Xylene
Flammability Limit - Lower (%):	1 %(V) Xylene
Vapor pressure:	No data available.
Relative vapor density:	No data available.
Evaporation Rate:	No data available.
Density:	Approximate 1,03 kg/dm ³ (20 °C)
Solubility(ies):	
Solubility in Water:	Very slightly soluble
Solubility (other):	Ethanol: Very slightly soluble Aliphatic hydrocarbons: Very slightly soluble Acetone: Miscible (in all proportions). Aromatic hydrocarbons: Miscible (in all proportions). Chlorinated solvents: Miscible (in all proportions).
Partition coefficient (n-octanol/water):	No data available.
Self-ignition:	> 500 °C Xylene
Decomposition Temperature:	No data available.
Kinematic viscosity:	Approximate 175 mm ² /s (25 °C)
Particle characteristics:	Not applicable.

9.2 Other information:

Dynamic viscosity:	Approximate 180 mPa.s (25 °C)
Oxidizing properties:	Not considered as oxidizing. Expert statement.

SECTION 10: Stability and reactivity

10.1 Reactivity:

No hazardous reaction known under normal conditions of use.

10.2 Chemical Stability:

Material is stable under normal conditions.

10.3 Possibility of hazardous reactions:

Will not occur.

10.4 Conditions to avoid:

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible Materials:

Strong oxidizing agents.

10.6 Hazardous Decomposition Products:

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Amorphous silica.

SECTION 11: Toxicological information

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

Acute toxicity:

Oral:

Based on available data, the classification criteria are not met.

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Not classified LD 50 (Rat): 3 523 mg/kg ; Method: According to a standardised method. ; Results obtained on a similar product

Dermal:

Based on available data, the classification criteria are not met.

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Harmful in contact with skin. LD 50 (Rabbit): > 1 000 - 2 000 mg/kg ; Results obtained on a similar product

Inhalation:

Based on available data, the classification criteria are not met.

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Harmful if inhaled. LC 50 (Rat ; 4 h ; Vapour): > 10 - 20 mg/l ; Results obtained on a similar product

Repeated dose toxicity:

Based on our knowledge of the composition information: May cause damage to organs through prolonged or repeated exposure.

REACTION MASS OF ETHYLBENZENE AND XYLENE :

May cause damage to organs through prolonged or repeated exposure. NOAEL: 250 mg/kg ; LOAEL: 500 mg/kg ; (Rat ; Female, Male ; 2 yr ; Gavage (Oral)) ; Method: OECD 451 ; Results obtained on a similar product

NOAEC: 7,8 mg/l ; (Rat ; 90 d ; Inhalation - vapor) ; Target Organ(s): auditory organ ; Results obtained on a similar product

Skin Corrosion/Irritation:

Based on our knowledge of the composition information: Causes skin irritation.

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Causes skin irritation. Irritant. (Rabbit) ; Results obtained on a similar product

Serious Eye Damage/Eye Irritation:

Based on our knowledge of the composition information: Causes serious eye irritation.

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Causes serious eye irritation. Irritant. (Rabbit) ; Results obtained on a similar product

Respiratory or Skin Sensitization:

Based on available data, the classification criteria are not met.

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Not classified ; Not a skin sensitizer. ; Method: Expert judgement

Germ Cell Mutagenicity:

Based on available data, the classification criteria are not met.

In vitro:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

In vitro mammalian chromosomal aberration test: No clastogenic effect. Method: OECD 473 ; Results obtained on a similar product

Bacterial reverse mutation test: No mutagenic effect. Method: OECD 471 ; Results obtained on a similar product

In vitro gene mutations test on mammalian cells: No mutagenic effect. Method: Similar to OECD 476 ; Results obtained on a similar product

In vivo:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Rodent dominant Lethal test: negative (Mouse ; Subcutaneous) ; Method: OECD 478 ; Results obtained on a similar product

Rodent dominant Lethal test: negative (Rat ; Intraperitoneal) ; Method: OECD 478 ; Results obtained on a similar product

Carcinogenicity:

Based on available data, the classification criteria are not met.

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Not classified

The product is not considered to be carcinogenic. NOAEL: $\geq$ 500 mg/kg (Rat ; Gavage (Oral)) ; Method: OECD 451 ; Results obtained on a similar product

Reproductive toxicity:

Fertility:

Based on available data, the classification criteria are not met.

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Not classified

Fertility study 2 generations: NOAEL (parent): $\geq$ 2,171 mg/l ; NOAEL (F1): 2,171 mg/l ; NOAEL (F2): 2,171 mg/l (Rat ; Female, Male ; Inhalation - vapor) ; Method: According to a standardised method. ; Results obtained on a similar product The product is not considered to affect fertility.

Teratogenicity:

Based on available data, the classification criteria are not met.

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Not classified

(Rat ; Inhalation) ; Method: OECD 414 ; Results obtained on a similar product The product is not considered to be toxic for development.

Specific Target Organ Toxicity - Single Exposure:

May cause respiratory irritation.

Inhalation: Target Organ(s): Respiratory system

May cause drowsiness or dizziness.

Target Organ(s): Nervous System

Specific Target Organ Toxicity - Repeated Exposure:

May cause damage to organs through prolonged or repeated exposure.

Target Organ(s): Ototoxicity

Aspiration Hazard:

Not classified

11.2 Information on other hazards:

Endocrine disrupting properties:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity:

Acute toxicity: Based on available data, the classification criteria are not met.

Fish:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

LC 50 (Oncorhynchus mykiss; 96 h ; semi-static) : 2,6 mg/l ; Method: OECD 203 ; Results obtained on a similar product

Aquatic Invertebrates:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

EC 50 (Water flea (Daphnia magna); 24 h ; Static) : 1 mg/l ; Method: OECD 202 ; Results obtained on a similar product

Aquatic plants:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

ErC50 (Algae (Pseudokirchneriella subcapitata); 48 h ; Static) : 4,36 mg/l ; Method: OECD 201 ; Results obtained on a similar product

NOEC (growth rate) (Algae (Pseudokirchneriella subcapitata); 72 h ; Static) : 0,44 mg/l ; Method: OECD 201 ; Results obtained on a similar product

Toxicity to microorganisms:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

EC 50 : 71,3 mg/l ; Results obtained on a similar product

Chronic Toxicity: Based on our knowledge of the composition information:, Harmful to aquatic life with long lasting effects.

Fish:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

NOEC (Danio rerio; 58 d ; Flow through) : 0,714 mg/l ; Method: OECD 210 ; Results obtained on a similar product

Aquatic Invertebrates:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

NOEC (Water flea (Daphnia magna); 21 d ; semi-static) : 0,96 mg/l ; Method: OECD 211 ; Results obtained on a similar product

Toxicity to soil dwelling organisms:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

NOEC 71,1 mg/kg (Annelids, 8 Weeks, Method: OECD 222) ; Results obtained on a similar product

NOEC 2,8 - 8 mg/kg (Arthropods, 28 d, Method: estimated)

Toxicity to terrestrial organisms: No data available.

Sediment Toxicity:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

EC50 22 - 75 mg/l (*Lumbriculus variegatus*)

12.2 Persistence and Degradability:

Photodegradation:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Phototransformation in air : Direct photolysis Half-Life : < 2,14 d (Method: estimated)

Biodegradation:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

98 % (28 d) ; Method: OECD 301 F ; The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability. Results obtained on a similar product

Biodegradation Simulation Tests:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Soil : DT50 = 23 d Results obtained on a similar product

12.3 Bioaccumulative potential:

Bioconcentration Factor (BCF):

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Bioconcentration Factor (BCF): 25,9 ; Method: QSAR

Partition coefficient (n-octanol/water):

Based on our knowledge of the composition information:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Log Kow: 3,16 (20 °C) ; Method: OECD 107

XYLENE (1330-20-7):

Log Kow: 3,16 (20 °C)

ETHYLBENZENE (100-41-4):

Log Kow: 3,15

TOLUENE (108-88-3):

Log Kow: 2,73 (20 °C)

12.4 Mobility in soil:

REACTION MASS OF ETHYLBENZENE AND XYLENE :

Log Koc: 2,73 ; Koc: 537 ; Method: OECD 121 ; Results obtained on a similar product

12.5 Results of PBT and vPvB assessment:

Based on our knowledge of the composition information:

XYLENE (1330-20-7):

None Reported

ETHYLBENZENE (100-41-4):
None Reported

TOLUENE (108-88-3):
Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria. (REACH (1907/2006) Ax XIII)
Not fulfilling vPvB (very persistent/very bioaccumulative) criteria. (REACH (1907/2006) Ax XIII)

12.6 Endocrine disrupting properties:

No data available.

12.7 Other adverse effects:

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Do not empty into drains. The user's attention is drawn to the possible existence of local regulations regarding disposal. Please observe the important information mentioned in the other sections. In particular, information on hazards identification and product stability and reactivity under sections 2 and 10.

Disposal methods:

Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Incinerate in suitable combustion chamber.

Contaminated Packaging:

Contaminated packages should be as empty as possible. Recycle following cleaning or dispose of at an authorised site. Packaging that cannot be cleaned should be disposed of in the same way as the product it contained.

Waste code:

The waste code of the European Waste Catalogue (EWC) cannot be determined for this product, as its determination depends on how the material is used by the end-users. The waste code has to be determined within the EU in agreement with the waste-disposal operator.

SECTION 14: Transport information

ADR

14.1 UN number or ID number:	UN 1307
14.2 UN Proper Shipping Name:	XYLENES MIXTURE
14.3 Transport Hazard Class(es):	
Class:	3
Label(s):	3
Hazard No. (ADR):	30
Tunnel restriction code:	(D/E)
14.4 Packing Group:	III
14.5 Environmental hazards:	No
14.6 Special precautions for user:	None.

ADN

14.1 UN number or ID number:	UN 1307
14.2 UN Proper Shipping Name:	XYLENES MIXTURE
14.3 Transport Hazard Class(es):	
Class:	3
Label(s):	3

Hazard No. (ADR):	–
14.4 Packing Group:	III
14.5 Environmental hazards:	No
14.6 Special precautions for user:	None.

RID

14.1 UN number or ID number:	UN 1307
14.2 UN Proper Shipping Name:	XYLENES MIXTURE
14.3 Transport Hazard Class(es):	
Class:	3
Label(s):	3
Hazard No. (ADR):	30
14.4 Packing Group:	III
14.5 Environmental hazards:	No
14.6 Special precautions for user:	None.

IMDG / IMO

14.1 UN number or ID number:	UN 1307
14.2 UN Proper Shipping Name:	XYLENES GEMISCH
14.3 Transport Hazard Class(es):	
Class:	3
Label(s):	3
EmS No.:	F-E , S-D
14.4 Packing Group:	III
14.5 Environmental hazards:	No
14.6 Special precautions for user:	None.
14.7 Maritime transport in bulk according to IMO instruments:	Not applicable

IATA

14.1 UN number or ID number:	UN 1307
14.2 Proper Shipping Name:	Xylenes Gemisch
14.3 Transport Hazard Class(es):	
Class:	3
Label(s):	3
14.4 Packing Group:	III
14.5 Environmental hazards:	No
14.6 Special precautions for user:	None.
Other information	
Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

SECTION 15: Regulatory information

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

EU Regulations:

EU. Ozone Depleters, Annex I to Regulation 2024/590 on Substances that Deplete the Ozone Layer:
None present or none present in regulated quantities.

EU. Substances that Deplete the Ozone Layer (Annex II) Regulation (EU) 2024/590: None present or none present in regulated quantities.

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: None

present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended: None present or none present in regulated quantities.

EU. Directive 2010/75/EU on Industrial Emissions (IPPC), Annex II, L 334/17:

Chemical name	CAS-No.
toluene	108-88-3

EU. REACH Annex XIV, Substances Subject to Authorization: None present or none present in regulated quantities.

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC): None present or none present in regulated quantities.

EU. REACH Annex XVII, Substances subject to restriction on marketing and use:

Chemical name	CAS-No.	Entry No:
toluene	108-88-3	48
ethylbenzene	100-41-4	40 3
xylene	1330-20-7	75 75 3 40

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

Chemical name	CAS-No.
toluene	108-88-3

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:

Chemical name	CAS-No.
ethylbenzene	100-41-4
xylene	1330-20-7
toluene	108-88-3

For information on the concentration of the substances listed in this section 15.1, please refer to section 3 of this document.

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

Inventory Status:

Canada DSL Inventory List:	On or in compliance with the inventory.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory.
US TSCA Inventory:	On or in compliance with the inventory.

EINECS, ELINCS or NLP:

On or in compliance with the inventory.

SECTION 16: Other information**Revision Information:**

SECTION 2:	Modification:	Classification of the substance or mixture
SECTION 3:	Modification:	Composition/information on ingredients

Abbreviations and acronyms:

CLP: Regulation No. 1272/2008.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

NOAEL - No Observable Adverse Effect Level

LOAEL - Lowest Observable Adverse Effect Level

ED: Endocrine Disruptor

SVHC: Listed on the Candidate List of substances of very high concern (SVHC)

Classification and procedure used to derive the classification for mixtures according to Regulation (EC)**1272/2008 [CLP]:**

Classification according to Regulation (EC) No 1272/2008 as amended.	Classification procedure
Flammable liquids ; Category 3 ; H226	On basis of test data
Skin irritation ; Category 2 ; H315	Calculation method
Serious eye irritation ; Category 2 ; H319	Calculation method
Specific Target Organ Toxicity - Single Exposure ; Category 3 ; H335	Calculation method
Specific Target Organ Toxicity - Single Exposure ; Category 3 ; H336	Calculation method
Specific Target Organ Toxicity - Repeated Exposure ; Category 2 ; H373	Calculation method
Chronic hazards to the aquatic environment ; Category 3 ; H412	On basis of test data

Wording of the H-statements in section 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.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H412	Harmful to aquatic life with long lasting effects.

Issue Date: 20.04.2026**Disclaimer:**

The information given is based on data available for the material, the components of the material, and similar materials. The information is believed to be correct. It is given in good faith. This information should be used to make an independent determination of the methods to safeguard workers and the environment.