

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

1.1. Product identifier

Trade name or designation of the mixture	TR-920 Mold Release
Registration number	-
Synonyms	None.
Product number	TR 920
Issue date	18-June-2019
Version number	03
Revision date	10-March-2020
Supersedes date	10-March-2020

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

Identified uses	Mold release.
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Company name	TR Industries a Division of Granitize Products Inc.
Address	11022 Vulcan Street South Gate, CA 90280-0893 United States
Telephone	(562) 923-5438
Emergency telephone	CHEMTREC: (800) 424-9300 CHEMTREC International: 00 1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

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

Physical hazards

Flammable liquids	Category 3	H226 - Flammable liquid and vapour.
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Health hazards

Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Specific target organ toxicity - single exposure	Category 3 respiratory tract irritation	H335 - May cause respiratory irritation.
Specific target organ toxicity - single exposure	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.
Aspiration hazard	Category 1	H304 - May be fatal if swallowed and enters airways.

Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
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Hazard summary

May be ignited by heat, sparks or flames. Causes skin irritation. Causes serious eye irritation. May cause irritation to the respiratory system. May cause drowsiness and dizziness. May be fatal if swallowed and enters airways. Dangerous for the environment if discharged into watercourses. Occupational exposure to the substance or mixture may cause adverse health effects.

2.2. Label elements

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

Contains:	1,2,4-Trimethyl benzene, 1,3,5-Trimethylbenzene, Cumene, Diethylbenzene, Ethylbenzene, Solvent naphtha (petroleum), light aromatic, Xylene
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Hazard pictograms



Signal word

Danger

Hazard statements

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic 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.
P273	Avoid release to the environment.

Response

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTRE/doctor.
P331	Do NOT induce vomiting.
P391	Collect spillage.

Storage

P403 + P235	Store in a well-ventilated place. Keep cool.
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Disposal

Not assigned.

Supplemental label information

None.

2.3. Other hazards

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapour. May cause flash fire or explosion.

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
1,2,4-Trimethyl benzene	30 - 60	95-63-6 202-436-9	-	601-043-00-3	#
Classification:		Flam. Liq. 3;H226, Asp. Tox. 1;H304, Skin Irrit. 2;H315, Eye Irrit. 2;H319, Acute Tox. 4;H332, STOT SE 3;H335, Aquatic Chronic 2;H411			
Solvent naphtha (petroleum), light aromatic	30 - 60	64742-95-6 265-199-0	-	649-356-00-4	
Classification:		Flam. Liq. 3;H226, Asp. Tox. 1;H304, Skin Irrit. 2;H315, STOT SE 3;H336, Aquatic Chronic 2;H411			P
1,3,5-Trimethylbenzene	5 - 10	108-67-8 203-604-4	-	601-025-00-5	#
Classification:		Flam. Liq. 3;H226, Asp. Tox. 1;H304, Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H335, Aquatic Chronic 2;H411			
Cumene	1 - 5	98-82-8 202-704-5	-	601-024-00-X	#
Classification:		Flam. Liq. 3;H226, Asp. Tox. 1;H304, STOT SE 3;H335, Aquatic Chronic 2;H411			C
Diethylbenzene	1 - 5	25340-17-4 246-874-9	-	-	
Classification:		Flam. Liq. 3;H226, Asp. Tox. 1;H304, Skin Irrit. 2;H315, Aquatic Acute 1;H400, Aquatic Chronic 1;H410			
Xylene	1 - 5	1330-20-7 215-535-7	-	601-022-00-9	#
Classification:		Flam. Liq. 3;H226, Asp. Tox. 1;H304, Acute Tox. 4;H312, Skin Irrit. 2;H315, Eye Irrit. 2;H319, Acute Tox. 4;H332, STOT SE 3;H335, STOT SE 3;H336, STOT RE 2;H373			C

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Ethylbenzene	0,1 - 1	100-41-4 202-849-4	-	601-023-00-4	#
Classification:	Flam. Liq. 2;H225, Asp. Tox. 1;H304, Acute Tox. 4;H332, STOT RE 2;H373, Aquatic Chronic 3;H412				

List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note P: The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260- P262-P301 + P310-P331 shall apply. This note applies only to certain complex oil-derived substances in Part 3.

Composition comments The full text for all H-statements is displayed in section 16.
All concentrations are in percent by weight unless otherwise indicated. Components not listed are either non-hazardous or are below reportable limits.

SECTION 4: First aid measures

General information Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison centre or doctor/physician if you feel unwell.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and delayed Aspiration may cause pulmonary oedema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards Flammable liquid and vapour.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Alcohol resistant foam. Carbon dioxide (CO₂). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

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

Special fire fighting procedures In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up.

6.2. Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

6.3. Methods and material for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist/vapours. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see section 10 of the SDS).

7.3. Specific end use(s)

Mould release.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List Components

	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	MAK	100 mg/m ³
		20 ppm

**Austria. MAK List
Components**

	Type	Value
	STEL	150 mg/m ³ 30 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	MAK	100 mg/m ³ 20 ppm
	STEL	150 mg/m ³ 30 ppm
Cumene (CAS 98-82-8)	MAK	100 mg/m ³ 20 ppm
	STEL	250 mg/m ³ 50 ppm
Ethylbenzene (CAS 100-41-4)	Ceiling	880 mg/m ³ 200 ppm
	MAK	440 mg/m ³ 100 ppm
Xylene (CAS 1330-20-7)	MAK	221 mg/m ³ 50 ppm
	STEL	442 mg/m ³ 100 ppm

**Belgium. Exposure Limit Values
Components**

	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m ³ 20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m ³ 20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m ³ 50 ppm
	TWA	100 mg/m ³ 20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	551 mg/m ³ 125 ppm
	TWA	442 mg/m ³ 100 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m ³ 100 ppm
	TWA	221 mg/m ³ 50 ppm

**Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work
Components**

	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m ³ 20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m ³ 20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m ³ 50 ppm

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
	TWA	100 mg/m ³ 20 ppm
Diethylbenzene (CAS 25340-17-4)	TWA	10 mg/m ³
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m ³
	TWA	435 mg/m ³
Xylene (CAS 1330-20-7)	STEL	442 mg/m ³ 100 ppm
	TWA	221 mg/m ³ 50 ppm

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	MAC	100 mg/m ³ 20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	MAC	100 mg/m ³ 20 ppm
Cumene (CAS 98-82-8)	MAC	100 mg/m ³ 20 ppm
	STEL	250 mg/m ³ 50 ppm
Ethylbenzene (CAS 100-41-4)	MAC	442 mg/m ³ 100 ppm
	STEL	884 mg/m ³ 200 ppm
Xylene (CAS 1330-20-7)	MAC	221 mg/m ³ 50 ppm
	STEL	442 mg/m ³ 100 ppm

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value
Cumene (CAS 98-82-8)	TWA	245 mg/m ³ 50 ppm

Czech Republic. OELs. Government Decree 361

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	Ceiling	250 mg/m ³
	TWA	100 mg/m ³
1,3,5-Trimethylbenzene (CAS 108-67-8)	Ceiling	250 mg/m ³
	TWA	100 mg/m ³
Cumene (CAS 98-82-8)	Ceiling	250 mg/m ³
	TWA	100 mg/m ³
Ethylbenzene (CAS 100-41-4)	Ceiling	500 mg/m ³
	TWA	200 mg/m ³
Xylene (CAS 1330-20-7)	Ceiling	400 mg/m ³
	TWA	200 mg/m ³

Denmark. Exposure Limit Values

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TLV	100 mg/m ³
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TLV	100 mg/m ³
		20 ppm
Cumene (CAS 98-82-8)	TLV	100 mg/m ³
		20 ppm
Ethylbenzene (CAS 100-41-4)	TLV	217 mg/m ³
		50 ppm
Xylene (CAS 1330-20-7)	TLV	109 mg/m ³
		25 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m ³
		20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m ³
		50 ppm
	TWA	100 mg/m ³
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m ³
		200 ppm
	TWA	442 mg/m ³
		100 ppm
Xylene (CAS 1330-20-7)	STEL	450 mg/m ³
		100 ppm
	TWA	200 mg/m ³
		50 ppm

Finland. Workplace Exposure Limits

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m ³
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m ³
		20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m ³
		50 ppm
	TWA	100 mg/m ³
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	880 mg/m ³
		200 ppm
	TWA	220 mg/m ³
		50 ppm
Xylene (CAS 1330-20-7)	STEL	440 mg/m ³
		100 ppm
	TWA	220 mg/m ³

Finland. Workplace Exposure Limits

Components	Type	Value
		50 ppm

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	VLE	250 mg/m3
Regulatory status:	Regulatory binding (VRC)	
		50 ppm
Regulatory status:	Regulatory binding (VRC)	
	VME	100 mg/m3
Regulatory status:	Regulatory binding (VRC)	
		20 ppm
Regulatory status:	Regulatory binding (VRC)	
1,3,5-Trimethylbenzene (CAS 108-67-8)	VLE	250 mg/m3
Regulatory status:	Regulatory binding (VRC)	
		50 ppm
Regulatory status:	Regulatory binding (VRC)	
	VME	100 mg/m3
Regulatory status:	Regulatory binding (VRC)	
		20 ppm
Regulatory status:	Regulatory binding (VRC)	
Cumene (CAS 98-82-8)	VLE	250 mg/m3
Regulatory status:	Regulatory binding (VRC)	
		50 ppm
Regulatory status:	Regulatory binding (VRC)	
	VME	100 mg/m3
Regulatory status:	Regulatory binding (VRC)	
		20 ppm
Regulatory status:	Regulatory binding (VRC)	
Ethylbenzene (CAS 100-41-4)	VLE	442 mg/m3
Regulatory status:	Regulatory binding (VRC)	
		100 ppm
Regulatory status:	Regulatory binding (VRC)	
	VME	88,4 mg/m3
Regulatory status:	Regulatory binding (VRC)	
		20 ppm
Regulatory status:	Regulatory binding (VRC)	
Xylene (CAS 1330-20-7)	VLE	442 mg/m3
Regulatory status:	Regulatory binding (VRC)	
		100 ppm
Regulatory status:	Regulatory binding (VRC)	
	VME	221 mg/m3
Regulatory status:	Regulatory binding (VRC)	
		50 ppm
Regulatory status:	Regulatory binding (VRC)	

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m3

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value
		20 ppm
Cumene (CAS 98-82-8)	TWA	50 mg/m ³ 10 ppm
Diethylbenzene (CAS 25340-17-4)	TWA	28 mg/m ³ 5 ppm
Ethylbenzene (CAS 100-41-4)	TWA	88 mg/m ³ 20 ppm
Xylene (CAS 1330-20-7)	TWA	440 mg/m ³ 100 ppm

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	AGW	100 mg/m ³ 20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	AGW	100 mg/m ³ 20 ppm
Cumene (CAS 98-82-8)	AGW	50 mg/m ³ 10 ppm
Ethylbenzene (CAS 100-41-4)	AGW	88 mg/m ³ 20 ppm
Xylene (CAS 1330-20-7)	AGW	200 mg/m ³

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	125 mg/m ³ 25 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	125 mg/m ³ 25 ppm
Cumene (CAS 98-82-8)	STEL	370 mg/m ³ 75 ppm
	TWA	245 mg/m ³ 50 ppm
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m ³ 125 ppm
	TWA	435 mg/m ³ 100 ppm
Xylene (CAS 1330-20-7)	STEL	650 mg/m ³ 150 ppm
	TWA	435 mg/m ³ 100 ppm

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m ³
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m ³

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
Cumene (CAS 98-82-8)	STEL	250 mg/m3
	TWA	100 mg/m3
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
	TWA	442 mg/m3
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
	TWA	221 mg/m3

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m3
		20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m3
		50 ppm
	TWA	100 mg/m3
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	200 mg/m3
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	109 mg/m3
		25 ppm

Ireland. Occupational Exposure Limits

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m3
		20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m3
		50 ppm
	TWA	100 mg/m3
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Italy. OELs
Components**

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m3
		20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m3
		50 ppm
	TWA	100 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m3
		20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m3
		50 ppm
	TWA	100 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	STEL	150 mg/m3
		30 ppm
	TWA	100 mg/m3
		20 ppm
Cumene (CAS 98-82-8)	STEL	170 mg/m3
		35 ppm

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)

Components	Type	Value
	TWA	100 mg/m3 20 ppm
Diethylbenzene (CAS 25340-17-4)	TWA	10 mg/m3
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3 200 ppm
	TWA	442 mg/m3 100 ppm
Solvent naphtha (petroleum), light aromatic (CAS 64742-95-6)	STEL	600 mg/m3
	TWA	100 ppm 300 mg/m3 50 ppm
Xylene (CAS 1330-20-7)	STEL	450 mg/m3 100 ppm
	TWA	200 mg/m3 50 ppm

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3 20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m3 20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m3 50 ppm
	TWA	100 mg/m3 20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3 200 ppm
	TWA	442 mg/m3 100 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3 20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m3 20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m3 50 ppm
	TWA	100 mg/m3 20 ppm

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m ³
		200 ppm
Xylene (CAS 1330-20-7)	TWA	442 mg/m ³
		100 ppm
	STEL	442 mg/m ³
	TWA	221 mg/m ³
		50 ppm

Netherlands. OELs (binding)

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	STEL	200 mg/m ³
	TWA	100 mg/m ³
1,3,5-Trimethylbenzene (CAS 108-67-8)	STEL	200 mg/m ³
	TWA	100 mg/m ³
Cumene (CAS 98-82-8)	STEL	250 mg/m ³
	TWA	100 mg/m ³
Ethylbenzene (CAS 100-41-4)	STEL	430 mg/m ³
	TWA	215 mg/m ³
Xylene (CAS 1330-20-7)	STEL	442 mg/m ³
	TWA	210 mg/m ³

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TLV	100 mg/m ³
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TLV	100 mg/m ³
		20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m ³
		50 ppm
	TLV	100 mg/m ³
Ethylbenzene (CAS 100-41-4)		20 ppm
	TLV	20 mg/m ³
Xylene (CAS 1330-20-7)		5 ppm
	TLV	108 mg/m ³
		25 ppm

Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	STEL	170 mg/m ³
	TWA	100 mg/m ³
1,3,5-Trimethylbenzene (CAS 108-67-8)	STEL	170 mg/m ³
	TWA	100 mg/m ³
Cumene (CAS 98-82-8)	STEL	250 mg/m ³
	TWA	50 mg/m ³

Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value
Diethylbenzene (CAS 25340-17-4)	STEL	400 mg/m ³
	TWA	100 mg/m ³
Ethylbenzene (CAS 100-41-4)	STEL	400 mg/m ³
	TWA	200 mg/m ³
Xylene (CAS 1330-20-7)	TWA	100 mg/m ³

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m ³
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m ³
		20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m ³
		50 ppm
	TWA	100 mg/m ³
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m ³
		200 ppm
	TWA	442 mg/m ³
		100 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value
Cumene (CAS 98-82-8)	TWA	50 ppm
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm
Xylene (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m ³
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m ³
		20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m ³
		50 ppm
	TWA	100 mg/m ³
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m ³
		200 ppm
	TWA	442 mg/m ³
		100 ppm

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m3
		20 ppm
Cumene (CAS 98-82-8)	TWA	100 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	TWA	442 mg/m3
		100 ppm
Xylene (CAS 1330-20-7)	TWA	221 mg/m3
		50 ppm

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value
Cumene (CAS 98-82-8)	STEL	250 mg/m3
		50 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m3
		20 ppm
Cumene (CAS 98-82-8)	TWA	100 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	TWA	442 mg/m3
		100 ppm
Xylene (CAS 1330-20-7)	TWA	221 mg/m3
		50 ppm

Spain. Occupational Exposure Limits

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m3
		20 ppm

Spain. Occupational Exposure Limits Components

Components	Type	Value
Cumene (CAS 98-82-8)	STEL	250 mg/m3 50 ppm
	TWA	100 mg/m3 20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3 200 ppm
	TWA	441 mg/m3 100 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7) Components

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	Ceiling	170 mg/m3
		35 ppm
	TWA	100 mg/m3 20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	Ceiling	170 mg/m3
		35 ppm
	TWA	100 mg/m3 20 ppm
Cumene (CAS 98-82-8)	Ceiling	250 mg/m3 50 ppm
	TWA	100 mg/m3 20 ppm
Ethylbenzene (CAS 100-41-4)	Ceiling	884 mg/m3
		200 ppm
	TWA	220 mg/m3 50 ppm
Xylene (CAS 1330-20-7)	Ceiling	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz Components

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	STEL	200 mg/m3
		40 ppm
	TWA	100 mg/m3 20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	STEL	200 mg/m3
		40 ppm
	TWA	100 mg/m3 20 ppm
Cumene (CAS 98-82-8)	STEL	400 mg/m3

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value
		80 ppm
	TWA	100 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	220 mg/m3
		50 ppm
	TWA	220 mg/m3
		50 ppm
Xylene (CAS 1330-20-7)	STEL	870 mg/m3
		200 ppm
	TWA	435 mg/m3
		100 ppm

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	125 mg/m3
		25 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	125 mg/m3
		25 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m3
		50 ppm
	TWA	125 mg/m3
		25 ppm
Ethylbenzene (CAS 100-41-4)	STEL	552 mg/m3
		125 ppm
	TWA	441 mg/m3
		100 ppm
Xylene (CAS 1330-20-7)	STEL	441 mg/m3
		100 ppm
	TWA	220 mg/m3
		50 ppm

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
		20 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	100 mg/m3
		20 ppm
Cumene (CAS 98-82-8)	STEL	250 mg/m3
		50 ppm
	TWA	100 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm

Components	Type	Value
	TWA	221 mg/m ³ 50 ppm

Biological limit values**Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)**

Components	Value	Determinant	Specimen	Sampling Time
1,3,5-Trimethylbenzene (CAS 108-67-8)	400 mg/g	Dimethylbenzoic acid (sum of all isomers)	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	1,5 g/g	Mandelic acid	Creatinine in urine	*
	1,5 mg/l	Ethylbenzene	Blood	*
	1,12 mol/mol	Mandelic acid	Creatinine in urine	*
	83,2 nmol/l	Ethylbenzene	End-exhaled air	*
	2 ppm	Ethylbenzene	End-exhaled air	*
	14,13 umol/l	Ethylbenzene	Blood	*
Xylene (CAS 1330-20-7)	1,5 g/g	Methylhippuric acids	Creatinine in blood	*
	1,5 mg/l	Xylene	Blood	*
	0,88 mol/mol	Methylhippuric acids	Creatinine in blood	*
	14,13 umol/l	Xylene	Blood	*

* - For sampling details, please see the source document.

Czech Republic. Limit Values for Indicators of Biological Exposure Tests in Urine and Blood, Annex 2, Tables 1 and 2, Government Decree 432/2003 Sb.

Components	Value	Determinant	Specimen	Sampling Time
Ethylbenzene (CAS 100-41-4)	1100 µmol/mmol	Mandelic acid	Creatinine in urine	*
	1500 mg/g	Mandelic acid	Creatinine in urine	*
Xylene (CAS 1330-20-7)	820 µmol/mmol	Methylhippuric acids	Creatinine in urine	*
	1400 mg/g	Methylhippuric acids	Creatinine in urine	*

* - For sampling details, please see the source document.

Finland. HTP-arvot, App 2., Biological Limit Values, (BRA/BGV) , Social Affairs and Ministry of Health

Components	Value	Determinant	Specimen	Sampling Time
Ethylbenzene (CAS 100-41-4)	5,2 mmol/l	Mandelic acid	Urine	*
Xylene (CAS 1330-20-7)	5 mmol/l	Methylhippuric acids	Urine	*

* - For sampling details, please see the source document.

France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065)

Components	Value	Determinant	Specimen	Sampling Time
Ethylbenzene (CAS 100-41-4)	1500 mg/g	Acide mandélique	Creatinine in urine	*
Xylene (CAS 1330-20-7)	1500 mg/g	Acides méthylhippuriques	Creatinine in urine	*

* - For sampling details, please see the source document.

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling Time
1,2,4-Trimethyl benzene (CAS 95-63-6)	400 mg/g	Dimethylbenzo esäuren (Summe aller Isomeren nach Hydrolyse)	Creatinine in urine	*
1,3,5-Trimethylbenzene (CAS 108-67-8)	400 mg/g	Dimethylbenzo esäuren (Summe aller Isomeren nach Hydrolyse)	Creatinine in urine	*
Cumene (CAS 98-82-8)	10 mg/g	2-Phenyl-2-propanol (nach Hydrolyse)	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	250 mg/g	Mandelsäure plus Phenylglyoxylsäure	Creatinine in urine	*
Xylene (CAS 1330-20-7)	2000 mg/l	Methylhippur-(Tolur-)säure (alle Isomere)	Urine	*

* - For sampling details, please see the source document.

Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

Components	Value	Determinant	Specimen	Sampling Time
Ethylbenzene (CAS 100-41-4)	1500 mg/g	mandelic acid	Creatinine in urine	*
	1110 µmol/mmol	mandelic acid	Creatinine in urine	*
Xylene (CAS 1330-20-7)	1500 mg/g	methyl hippuric acids	Creatinine in urine	*
	860 µmol/mmol	methyl hippuric acids	Creatinine in urine	*

* - For sampling details, please see the source document.

Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents, Annex 2

Components	Value	Determinant	Specimen	Sampling Time
Ethylbenzene (CAS 100-41-4)	1067 mg/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
	12 mg/l	2-ethylphenol	Urine	*
Xylene (CAS 1330-20-7)	1334 mg/g	Methylhippuric acids	Creatinine in urine	*
	2000 mg/l	Methylhippuric acids	Urine	*
	1,5 mg/l	Xylene	Blood	*

* - For sampling details, please see the source document.

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

Components	Value	Determinant	Specimen	Sampling Time
Ethylbenzene (CAS 100-41-4)	700 mg/g	Suma del ácido mandélico y el ácido fenilgloxílico	Creatinine in urine	*
Xylene (CAS 1330-20-7)	1 g/g	Ácidos metilhipúricos	Creatinine in urine	*

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Components	Value	Determinant	Specimen	Sampling Time
Cumene (CAS 98-82-8)	20 mg/g	2-Phenyl-2-propanol (nach Hydrolyse)	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	600 mg/g	Mandelsäure plus Phenylglyoxylsäure	Creatinine in urine	*
Xylene (CAS 1330-20-7)	2 g/l	Methyl-Hippursäure	Urine	*

* - For sampling details, please see the source document.

UK. EH40 Biological Monitoring Guidance Values (BMGVs)

Components	Value	Determinant	Specimen	Sampling Time
Xylene (CAS 1330-20-7)	650 mmol/mol	Methyl hippuric acid	Creatinine in urine	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

Exposure guidelines**EU Exposure Limit Values: Skin designation**

Cumene (CAS 98-82-8)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
Xylene (CAS 1330-20-7)	Can be absorbed through the skin.

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Cumene (CAS 98-82-8)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
Xylene (CAS 1330-20-7)	Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Explosion-proof general and local exhaust ventilation. Provide easy access to water supply and eye wash facilities.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Wear safety glasses with side shields (or goggles). Wear face shield if there is risk of splashes. Eye protection should meet standard EN 166.

Skin protection

- Hand protection Wear suitable gloves tested to EN374. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Nitrile gloves are recommended. Other suitable gloves can be recommended by the glove supplier.

- Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

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 respiratory equipment with combination filter, type A2/P2. Respiratory protection should meet standard EN 14387. Check with respiratory protective equipment suppliers.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures When using do not smoke. 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.

Environmental exposure controls Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Colour	Clear.
Odour	Characteristic.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 153 °C (> 307,4 °F)
Flash point	> 38,0 °C (> 100,4 °F)
Evaporation rate	Slower than ether.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	49 mm Hg (20°C / 68°F)
Vapour density	> 1 (Air=1)
Relative density	0,873 (Water=1)
Solubility(ies)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	480 °C (896 °F) (Estimated)
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2. Other information

VOC	> 85 %
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SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Protect against direct sunlight. Contact with incompatible materials.
10.5. Incompatible materials	Strong acids. Strong oxidising agents. Halogens. Strong bases. Reducing Agents. Amines. Ammonia. Aldehydes.
10.6. Hazardous decomposition products	Thermal decomposition of this product can generate carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	May cause drowsiness and dizziness. May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. May be absorbed through the skin.
Eye contact	Causes serious eye irritation.
Ingestion	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms Aspiration may cause pulmonary oedema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

11.1. Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test Results
1,2,4-Trimethyl benzene (CAS 95-63-6)		
<u>Acute</u>		
Oral		
LD50	Rat	2720 - 3960 mg/kg
Diethylbenzene (CAS 25340-17-4)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg
Oral		
LD50	Rat	2050 mg/kg
Ethylbenzene (CAS 100-41-4)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	15400 mg/kg
Inhalation		
LC50	Rat	17,4 mg/l, 4 hours
Oral		
LD50	Rat	3500 - 4700 mg/kg
Xylene (CAS 1330-20-7)		
<u>Acute</u>		
Oral		
LD50	Rat	3523 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.	
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.	
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.	
Carcinogenicity	Risk of cancer cannot be excluded with prolonged exposure.	
Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)		
Solvent naphtha (petroleum), light aromatic (CAS 64742-95-6)		
IARC Monographs. Overall Evaluation of Carcinogenicity		
Cumene (CAS 98-82-8)	2B Possibly carcinogenic to humans.	
Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.	
Solvent naphtha (petroleum), light aromatic (CAS 64742-95-6)	3 Not classifiable as to carcinogenicity to humans.	
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.	
Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.	
Specific target organ toxicity - single exposure	May cause respiratory irritation. May cause drowsiness and dizziness.	
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.	
Aspiration hazard	May be fatal if swallowed and enters airways.	
Mixture versus substance information	No information available.	
Other information	Symptoms may be delayed.	

SECTION 12: Ecological information

12.1. Toxicity Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
1,2,4-Trimethyl benzene (CAS 95-63-6)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Fathead minnow (Pimephales promelas) 7,72 mg/l, 96 hours
Diethylbenzene (CAS 25340-17-4)		
Aquatic		
<i>Acute</i>		
Algae	ErC50	Pseudokirchneriella subcapitata 1,21 mg/l, 72 hours
Crustacea	EC50	Daphnia magna 2,01 mg/l, 48 hours
Fish	LC50	Oncorhynchus mykiss 0,673 mg/l, 96 hours
Ethylbenzene (CAS 100-41-4)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna) 1,81 - 2,38 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 4,2 mg/l, 96 hours
<i>Chronic</i>		
Crustacea	EC50	Ceriodaphnia dubia 3,6 mg/l, 7 days
Solvent naphtha (petroleum), light aromatic (CAS 64742-95-6)		
Aquatic		
<i>Acute</i>		
Crustacea	EL50	Daphnia 4,5 mg/l, 48 hours
Fish	LL50	Oncorhynchus mykiss 10 mg/l, 96 hours
Xylene (CAS 1330-20-7)		
Aquatic		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 2,6 mg/l, 96 hours

12.2. Persistence and degradability No data is available on the degradability of this product.

12.3. Bioaccumulative potential

Partition coefficient

n-octanol/water (log Kow)

Cumene (CAS 98-82-8)	3,66
Ethylbenzene (CAS 100-41-4)	3,15
Xylene (CAS 1330-20-7)	3,12 - 3,2

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available for this product.

12.5. Results of PBT and vPvB assessment This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation potential.

12.7. Additional information

Estonia Dangerous substances in groundwater Data

Ethylbenzene (CAS 100-41-4)	ETHYLBENZENE 0,5 ug/l ETHYLBENZENE 50 ug/l
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Estonia Dangerous substances in soil Data

Ethylbenzene (CAS 100-41-4)	ETHYLBENZENE 0,1 mg/kg ETHYLBENZENE 5 mg/kg ETHYLBENZENE 50 mg/kg
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number	UN1268
14.2. UN proper shipping name	PETROLEUM PRODUCTS, N.O.S.
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Hazard No. (ADR)	30
Tunnel restriction code	D/E
14.4. Packing group	III
14.5. Environmental hazards	Yes
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number	UN1268
14.2. UN proper shipping name	PETROLEUM PRODUCTS, N.O.S.
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
14.4. Packing group	III
14.5. Environmental hazards	Yes
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number	UN1268
14.2. UN proper shipping name	PETROLEUM PRODUCTS, N.O.S.
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
14.4. Packing group	III
14.5. Environmental hazards	Yes
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number	UN1268
14.2. UN proper shipping name	Petroleum products, n.o.s.
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
14.4. Packing group	III
14.5. Environmental hazards	Yes
ERG Code	3L
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

14.1. UN number	UN1268
14.2. UN proper shipping name	PETROLEUM PRODUCTS, N.O.S.
14.3. Transport hazard class(es)	
Class	3

Subsidiary risk	-
14.4. Packing group	III
14.5. Environmental hazards	
Marine pollutant	Yes
EmS	F-E, S-E
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Ethylbenzene (CAS 100-41-4)

Xylene (CAS 1330-20-7)

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Solvent naphtha (petroleum), light aromatic (CAS 64742-95-6)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Solvent naphtha (petroleum), light aromatic (CAS 64742-95-6)

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

1,2,4-Trimethyl benzene (CAS 95-63-6)

1,3,5-Trimethylbenzene (CAS 108-67-8)

Cumene (CAS 98-82-8)

Ethylbenzene (CAS 100-41-4)

Xylene (CAS 1330-20-7)

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations

Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.

IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG Code: International Maritime Dangerous Goods Code.
MARPOL: International Convention for the Prevention of Pollution from Ships.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short-Term Exposure Limit.
TWA: Time Weighted Average Value.

References

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
EPA: AQUIRE database
HSDB® - Hazardous Substances Data Bank
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Training information

Follow training instructions when handling this material.

Disclaimer

TR Industries cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.