



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issuing Date 27-Jul-2022

Revision Date 27-Jul-2022

Revision Number 1

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

1.1. Product identifier

Product Code(s) ADS, ADSP
Product Name Diesel Injector Clean + Cetane Boost
Synonyms None
Pure substance/mixture Mixture

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

Recommended use Fuel additive
Uses advised against Avoid formation of mists

1.3. Details of the supplier of the safety data sheet

Supplier
AMSOIL INC.
One AMSOIL Center
Superior, WI 54880, USA
T: +1 715-392-7101

For further information, please contact

E-mail address compliance@amsoil.com

1.4. Emergency telephone number

Emergency telephone CHEMTREC International: +1 703-741-5970

Emergency telephone - §45 - (EC)1272/2008

Europe 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Aspiration hazard	Category 1 - (H304)
Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Dermal	Category 4 - (H312)
Acute toxicity - Inhalation (Vapors)	Category 4 - (H332)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Germ cell mutagenicity	Category 1B - (H340)
Carcinogenicity	Category 1B - (H350)
Specific target organ toxicity (single exposure)	Category 3 - (H335, H336)
Chronic aquatic toxicity	Category 2 - (H411)
Flammable liquids	Category 3 - (H226)

2.2. Label elements

Contains Νιτρικός 2-αιθυλεξυλεστέρας, Hydrogenated base oil, Benzene, 1,2,4-trimethyl-, Naphthalene

**Signal word**

Danger

Hazard statements

H302 - Harmful if swallowed
 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
 H340 - May cause genetic defects
 H350 - May cause cancer
 H411 - Toxic to aquatic life with long lasting effects
 H226 - Flammable liquid and vapor

Precautionary Statements - EU (§28, 1272/2008)

P201 - Obtain special instructions before use
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P273 - Avoid release to the environment
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
 P331 - Do NOT induce vomiting
 P370 + P378 - In case of fire: Use dry chemical, CO₂, water spray or alcohol-resistant foam to extinguish
 P391 - Collect spillage

Additional information

This product requires child resistant fastenings if supplied to the general public. This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

Toxic to aquatic life.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

Chemical name	EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances of Very High Concern (SVHC) for Authorisation	EU - REACH (1907/2006) - Endocrine Disruptor Assessment List of Substances
phenol, 4-dodecyl-, branched	Endocrine disrupting properties	Endocrine disrupting properties

Chemical name	Endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100(3) or Commission Regulation (EU) 2018/605(4)
phenol, 4-dodecyl-, branched	Endocrine disrupting properties

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Νιτρικός 2-αιθυλεξυλεστέρας 27247-96-7	30-60	No data available	248-363-6	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Aquatic Chronic 2 (H411)	-	-	-
Hydrogenated base oil 64742-95-6	15-40	No data available	265-199-0	Flam. Liq. 3 (H226) Asp. Tox. 1 { H304) STOT SE 3 (H335) STOT SE 3 (H336) Carc.2 (H351) Skin Irrit. 3 (H316) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411)	-	-	-
Hydrogenated base oil 64742-94-5	10-30	No data available	265-198-5	Asp. Tox. 1 (H304)	-	-	-
Benzene, 1,2,4-trimethyl- 95-63-6	7-13	No data available	202-436-9	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) Aquatic Chronic 2 (H411) Flam. Liq. 3 (H226)	-	-	-
non hazardous ingredient -	5-10	No data available	No information available	No data available	-	-	-
Naphthalene 91-20-3	0.5-1.5	No data available	202-049-5	Acute Tox. 4 (H302) Carc. 2 (H351) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	-	-
Xylene 1330-20-7	0.1-1	No data available	215-535-7	Acute Tox. 4 (H312) Acute Tox. 4 (H332)	-	-	-

				Skin Irrit. 2 (H315) Flam. Liq. 3 (H226)			
Benzene, ethylenated, residues, distn. lights 178535-25-6	0.1-1	No data available	No information available	No data available	-	-	-
Cumene 98-82-8	0.1-1	No data available	202-704-5	STOT SE 3 (H335) Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411) Flam. Liq. 3 (H226)	-	-	-
phenol, 4-dodecyl-, branched 210555-94-5	0.1-1	No data available	No information available	Skin Corr. 1C (H314) Eye Dam. 1 (H318) Repr. 1B (H360F) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	10	10
triethylbenzene 25340-18-5	0.1-1	No data available	246-875-4	No data available	-	-	-
Toluene 108-88-3	<0.1	-	203-625-9	Skin Irrit. 2 (H315) Repr. 2 (H361d) STOT SE 3 (H336) STOT RE 2 (H373) Asp. Tox. 1 (H304) Flam. Liq. 2 (H225)	-	-	-
Formaldehyde 50-00-0	<0.1	No data available	200-001-8	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Muta. 2 (H341) Carc. 1B (H350)	Eye Irrit. 2 :: 5%<=C<25% Skin Corr. 1B :: C>=25% Skin Irrit. 2 :: 5%<=C<25% Skin Sens. 1 :: C>=0.2% STOT SE 3 :: C>=5%	-	-
Ethylbenzene 100-41-4	<0.1	No data available	202-849-4	Acute Tox. 4 (H332) STOT RE 2 (H373) Asp. Tox. 1 (H304) Flam. Liq. 2	-	-	-

				(H225)			
--	--	--	--	--------	--	--	--

Full text of H- and EUH-phrases: see section 16**Acute Toxicity Estimate**

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Νιτρικός 2-αιθυλεξυλεστέρας 27247-96-7	9609.6	4804.8	No data available	No data available	No data available
Hydrogenated base oil 64742-95-6	8400	2002	No data available	No data available	No data available
Hydrogenated base oil 64742-94-5	5005	2002	0.5906	No data available	No data available
Benzene, 1,2,4-trimethyl- 95-63-6	3280	3163.16	18	No data available	No data available
Naphthalene 91-20-3	1110	1120	0.4004	No data available	No data available
Xylene 1330-20-7	3500	4354.35	29.08	No data available	No data available
Cumene 98-82-8	1400	10578	No data available	21.557	No data available
Toluene 108-88-3	2600	12000	12.5	No data available	No data available
Formaldehyde 50-00-0	100	2002	No data available	No data available	462.537
Ethylbenzene 100-41-4	3500	15400	17.4	No data available	No data available

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS No	SVHC candidates
phenol, 4-dodecyl-, branched	210555-94-5	X

SECTION 4: First aid measures**4.1. Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention. Immediate medical attention is required.

Inhalation

Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical attention. Delayed pulmonary edema may occur.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical attention.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing.

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

Symptoms	Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
-----------------	---

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

Note to physicians	Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.
---------------------------	---

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam.
-------------------------------------	---

Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
---------------------------------------	--

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
---	---

Hazardous combustion products	Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
--------------------------------------	--

5.3. Advice for firefighters

Specific/special fire-fighting measures	Fires need to be assessed to determine appropriate protocols and safety measures for firefighting, including establishing safe zones, extinguishing media to be used, firefighter protection, and actions to control or extinguish the fire.
--	--

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
---	--

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.
-----------------------------	--

Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.
--------------------------	--

For emergency responders	Use personal protection recommended in Section 8.
---------------------------------	---

6.2. Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections For additional information see: Section 8: Exposure controls/personal protection; Section 12: Ecological information; Section 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid breathing vapors or mists. Avoid contact with used product. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Do not reuse empty containers. Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Store locked up. Store away from other materials.

7.3. Specific end use(s)

Specific use(s). The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits Under conditions which may generate mists, the following exposure limits are

recommended: Long-term exposure limit (8-hour TWA): 5 mg/m³. Short-term exposure limit (15-minute): 10 mg/m³.

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ STEL 30 ppm STEL 150 mg/m ³		TWA: 20 ppm TWA: 100.0 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ H*	TWA: 10 ppm TWA: 53 mg/m ³ STEL: 15 ppm STEL: 80 mg/m ³ D*	STEL: 75.0 mg/m ³ TWA: 50.0 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³
Xylene 1330-20-7	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ *	TWA: 50 ppm TWA: 221 mg/m ³ STEL 100 ppm STEL 442 mg/m ³	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ D*	STEL: 100 ppm STEL: 442 mg/m ³ TWA: 50 ppm TWA: 221.0 mg/m ³ K*	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ *
Cumene 98-82-8	* during exposure monitoring, account should be taken of relevant biological monitoring values as suggested by the Scientific Committee on Occupational Exposure Limits for Chemicals Agents (SCOEL) STEL: 250 mg/m ³ during exposure monitoring, account should be taken of relevant biological monitoring values as suggested by the Scientific Committee on Occupational Exposure Limits for Chemicals Agents (SCOEL) STEL: 50 ppm during exposure monitoring, account should be taken of relevant biological monitoring values as suggested by the Scientific Committee on Occupational Exposure Limits for Chemicals Agents (SCOEL) TWA: 50 mg/m ³ during exposure monitoring, account should be taken of relevant biological monitoring values as suggested by the Scientific Committee on Occupational	TWA: 10 ppm TWA: 50 mg/m ³ STEL 50 ppm STEL 250 mg/m ³ H*	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ D*	STEL: 50 ppm STEL: 250 mg/m ³ TWA: 10 ppm TWA: 50 mg/m ³ K*	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ *

	Exposure Limits for Chemicals Agents (SCOEL) TWA: 10 ppm during exposure monitoring, account should be taken of relevant biological monitoring values as suggested by the Scientific Committee on Occupational Exposure Limits for Chemicals Agents (SCOEL) *				
Toluene 108-88-3	TWA: 50 ppm TWA: 192 mg/m ³ *	TWA: 50 ppm TWA: 190 mg/m ³ STEL 100 ppm STEL 380 mg/m ³ H*	TWA: 20 ppm TWA: 77 mg/m ³ STEL: 100 ppm STEL: 384 mg/m ³ D*	STEL: 100 ppm STEL: 384.0 mg/m ³ TWA: 50 ppm TWA: 192.0 mg/m ³ K*	TWA: 50 ppm TWA: 192 mg/m ³ STEL: 100 ppm STEL: 384 mg/m ³ *
Formaldehyde 50-00-0	+ TWA: 0.37 mg/m ³ TWA: 0.3 ppm * STEL: 0.74 mg/m ³ STEL: 0.6 ppm	TWA: 0.3 ppm TWA: 0.37 mg/m ³ STEL 0.6 ppm STEL 0.74 mg/m ³ Sh+		STEL: 0.5 ppm STEL: 0.74 mg/m ³ STEL: 0.6 ppm Skin Sensitisation TWA: 0.37 mg/m ³ TWA: 0.3 ppm TWA: 0.62 mg/m ³	TWA: 0.3 ppm TWA: 0.37 mg/m ³ TWA: 0.5 ppm TWA: 0.62 mg/m ³ STEL: 0.6 ppm STEL: 0.74 mg/m ³ Skin Sensitisation
Ethylbenzene 100-41-4	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ *	TWA: 100 ppm TWA: 440 mg/m ³ STEL 200 ppm STEL 880 mg/m ³ H*	TWA: 20 ppm TWA: 87 mg/m ³ STEL: 125 ppm STEL: 551 mg/m ³ D*	STEL: 545 mg/m ³ TWA: 435 mg/m ³ K*	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ *
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 100 mg/m ³ Ceiling: 250 mg/m ³ D*	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 50 mg/m ³ Ceiling: 100 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 1 ppm TWA: 5 mg/m ³ STEL: 2 ppm STEL: 10 mg/m ³
Xylene 1330-20-7	* STEL: 100 ppm STEL: 442 mg/m ³ TWA: 50 ppm TWA: 221 mg/m ³	TWA: 200 mg/m ³ Ceiling: 400 mg/m ³ D*	TWA: 25 ppm TWA: 109 mg/m ³ H*	TWA: 50 ppm TWA: 200 mg/m ³ STEL: 100 ppm STEL: 450 mg/m ³ A*	TWA: 50 ppm TWA: 220 mg/m ³ STEL: 100 ppm STEL: 440 mg/m ³ iho*
Cumene 98-82-8	* STEL: 50 ppm STEL: 250 mg/m ³ TWA: 10 ppm TWA: 50 mg/m ³	TWA: 100 mg/m ³ Ceiling: 250 mg/m ³ D*	TWA: 10 ppm TWA: 50 mg/m ³ H*	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ A*	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ iho*
Toluene 108-88-3	* STEL: 100 ppm STEL: 384 mg/m ³ TWA: 50 ppm TWA: 192 mg/m ³	TWA: 200 mg/m ³ Ceiling: 500 mg/m ³ D*	TWA: 25 ppm TWA: 94 mg/m ³ H*	TWA: 50 ppm TWA: 192 mg/m ³ STEL: 100 ppm STEL: 384 mg/m ³ A*	TWA: 25 ppm TWA: 81 mg/m ³ STEL: 100 ppm STEL: 380 mg/m ³ iho*
Formaldehyde 50-00-0	STEL: 0.74 mg/m ³ STEL: 0.6 ppm TWA: 0.3 ppm TWA: 0.37 mg/m ³	TWA: 0.37 mg/m ³ Ceiling: 0.74 mg/m ³ D* S+	Ceiling: 0.28 ppm Ceiling: 0.437 mg/m ³	S+ TWA: 0.5 ppm TWA: 0.6 mg/m ³ STEL: 1 ppm STEL: 1.2 mg/m ³	TWA: 0.3 ppm TWA: 0.37 mg/m ³ STEL: 0.6 ppm STEL: 0.74 mg/m ³

Ethylbenzene 100-41-4	* STEL: 200 ppm STEL: 884 mg/m ³ TWA: 100 ppm TWA: 442 mg/m ³	TWA: 200 mg/m ³ Ceiling: 500 mg/m ³ D*	TWA: 50 ppm TWA: 217 mg/m ³ H*	S+ TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ A*	TWA: 50 ppm TWA: 220 mg/m ³ STEL: 200 ppm STEL: 880 mg/m ³ iho*
Chemical name	France	Germany	Germany MAK	Greece	Hungary
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ Peak: 40 ppm Peak: 200 mg/m ³	TWA: 25 ppm TWA: 125 mg/m ³	TWA: 100 mg/m ³
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 0.4 ppm TWA: 2 mg/m ³ H*	*	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 50 mg/m ³
Xylene 1330-20-7	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ *	TWA: 50 ppm TWA: 220 mg/m ³ H*	TWA: 50 ppm TWA: 220 mg/m ³ Peak: 100 ppm Peak: 440 mg/m ³ *	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 650 mg/m ³ *	TWA: 221 mg/m ³ STEL: 442 mg/m ³ b*
Cumene 98-82-8	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ *	TWA: 10 ppm TWA: 50 mg/m ³ H*	TWA: 10 ppm TWA: 50 mg/m ³ Peak: 40 ppm Peak: 200 mg/m ³ *	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ *	TWA: 50 mg/m ³ STEL: 250 mg/m ³ b*
triethylbenzene 25340-18-5	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³				
Toluene 108-88-3	TWA: 20 ppm TWA: 76.8 mg/m ³ STEL: 100 ppm STEL: 384 mg/m ³ *	TWA: 50 ppm TWA: 190 mg/m ³ H*	TWA: 50 ppm TWA: 190 mg/m ³ Peak: 100 ppm Peak: 380 mg/m ³ *	TWA: 50 ppm TWA: 192 mg/m ³ STEL: 100 ppm STEL: 384 mg/m ³ *	TWA: 190 mg/m ³ STEL: 380 mg/m ³ b*
Formaldehyde 50-00-0	TWA: 0.5 ppm TWA: 0.3 ppm TWA: 0.37 mg/m ³ TWA: 0.62 mg/m ³ STEL: 0.6 ppm STEL: 0.74 mg/m ³	TWA: 0.3 ppm TWA: 0.37 mg/m ³ Sh+	TWA: 0.3 ppm TWA: 0.37 mg/m ³ Peak: 0.6 ppm Peak: 0.74 mg/m ³ skin sensitizer	TWA: 0.3 ppm TWA: 0.37 mg/m ³ STEL: 0.6 ppm STEL: 0.74 mg/m ³ Skin sensitization	TWA: 0.37 mg/m ³ sz+ STEL: 0.74 mg/m ³ b*
Ethylbenzene 100-41-4	TWA: 20 ppm TWA: 88.4 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ *	TWA: 20 ppm TWA: 88 mg/m ³ H*	TWA: 20 ppm TWA: 88 mg/m ³ Peak: 40 ppm Peak: 176 mg/m ³ *	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³	TWA: 442 mg/m ³ STEL: 884 mg/m ³ b*
Chemical name	Ireland	Italy	Italy REL	Latvia	Lithuania
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 60 ppm STEL: 300 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³		TWA: 20 ppm TWA: 100 mg/m ³	
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 30 ppm STEL: 150 mg/m ³		TWA: 10 ppm TWA: 52 mg/m ³ cute*	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³
Xylene 1330-20-7	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ Sk*	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ cute*	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 150 ppm STEL: 651 mg/m ³	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ Ada*	O* TWA: 221 mg/m ³ TWA: 50 ppm STEL: 442 mg/m ³ STEL: 100 ppm
Cumene 98-82-8	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ Sk*	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ cute*	TWA: 50 ppm TWA: 246 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ Ada*	O* TWA: 50 mg/m ³ TWA: 10 ppm STEL: 170 mg/m ³ STEL: 35 ppm

Toluene 108-88-3	TWA: 192 mg/m ³ TWA: 50 ppm STEL: 384 mg/m ³ STEL: 100 ppm Sk*	TWA: 50 ppm TWA: 192 mg/m ³ cute*	TWA: 20 ppm TWA: 75.4 mg/m ³	TWA: 14 ppm TWA: 50 mg/m ³ STEL: 40 ppm STEL: 150 mg/m ³ Ada*	O* TWA: 50 ppm TWA: 192 mg/m ³ STEL: 100 ppm STEL: 384 mg/m ³
Formaldehyde 50-00-0	TWA: 0.3 ppm TWA: 0.5 ppm TWA: 0.37 mg/m ³ TWA: 0.62 mg/m ³ STEL: 0.6 ppm STEL: 0.738 mg/m ³ STEL: 0.62 mg/m ³ Sens+	TWA: 0.37 mg/m ³ TWA: 0.3 ppm TWA: 0.62 mg/m ³ TWA: 0.5 ppm STEL: 0.74 mg/m ³ STEL: 0.6 mg/m ³ cute*	senD+ STEL: 0.3 ppm STEL: 0.37 mg/m ³	TWA: 0.37 mg/m ³ TWA: 0.62 mg/m ³ TWA: 0.3 ppm TWA: 0.5 ppm STEL: 0.74 mg/m ³ STEL: 0.6 ppm	J+ TWA: 0.3 ppm TWA: 0.37 mg/m ³ TWA: 0.62 mg/m ³ TWA: 0.5 ppm STEL: 0.74 mg/m ³ STEL: 0.6 ppm
Ethylbenzene 100-41-4	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ Sk*	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ cute*	TWA: 20 ppm TWA: 87 mg/m ³	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ Ada*	O* TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Νιτρικός 2-αιθυλεξυλεστέρας 27247-96-7					STEL: 7 mg/m ³ TWA: 3.5 mg/m ³
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 100 mg/m ³ STEL: 200 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 150 mg/m ³ STEL: 30 ppm	STEL: 170 mg/m ³ TWA: 100 mg/m ³ skóra*
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 50 mg/m ³ STEL: 80 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 20 ppm STEL: 75 mg/m ³	STEL: 50 mg/m ³ TWA: 20 mg/m ³ skóra*
Xylene 1330-20-7	Peau* STEL: 100 ppm STEL: 442 mg/m ³ TWA: 50 ppm TWA: 221 mg/m ³	skin* STEL: 100 ppm STEL: 442 mg/m ³ TWA: 50 ppm TWA: 221 mg/m ³	TWA: 210 mg/m ³ STEL: 442 mg/m ³ H*	TWA: 25 ppm TWA: 108 mg/m ³ STEL: 37.5 ppm STEL: 135 mg/m ³ H*	STEL: 200 mg/m ³ TWA: 100 mg/m ³ skóra*
Cumene 98-82-8	Peau* STEL: 50 ppm STEL: 250 mg/m ³ TWA: 20 ppm TWA: 100 mg/m ³	skin* STEL: 50 ppm STEL: 250 mg/m ³ TWA: 10 ppm TWA: 50 mg/m ³	TWA: 50 mg/m ³ STEL: 250 mg/m ³ H*	TWA: 50 mg/m ³ TWA: 10 ppm STEL: 250 mg/m ³ STEL: 50 ppm H*	STEL: 250 mg/m ³ TWA: 50 mg/m ³ skóra*
Toluene 108-88-3	Peau* STEL: 100 ppm STEL: 384 mg/m ³ TWA: 50 ppm TWA: 192 mg/m ³	skin* STEL: 100 ppm STEL: 384 mg/m ³ TWA: 50 ppm TWA: 192 mg/m ³	TWA: 150 mg/m ³ STEL: 384 mg/m ³	TWA: 25 ppm TWA: 94 mg/m ³ STEL: 37.5 ppm STEL: 141 mg/m ³ H*	STEL: 200 mg/m ³ TWA: 100 mg/m ³ skóra*
Formaldehyde 50-00-0			TWA: 0.15 mg/m ³ STEL: 0.5 mg/m ³	TWA: 0.37 mg/m ³ TWA: 0.3 ppm A+ STEL: 0.74 mg/m ³ STEL: 0.6 ppm Ceiling: 1 ppm Ceiling: 1.2 mg/m ³	Skin Sensitisation STEL: 0.74 mg/m ³ TWA: 0.37 mg/m ³ skóra*
Ethylbenzene 100-41-4	Peau* STEL: 200 ppm STEL: 884 mg/m ³ TWA: 100 ppm TWA: 442 mg/m ³	skin* STEL: 200 ppm STEL: 884 mg/m ³ TWA: 100 ppm TWA: 442 mg/m ³	TWA: 215 mg/m ³ STEL: 430 mg/m ³ H*	TWA: 5 ppm TWA: 20 mg/m ³ STEL: 10 ppm STEL: 30 mg/m ³ H*	STEL: 400 mg/m ³ TWA: 200 mg/m ³ skóra*
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 40 ppm	TWA: 20 ppm TWA: 100 mg/m ³

				STEL: 200 mg/m ³	
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 15 ppm Cutânea*	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ K* Ceiling: 80 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 10 ppm STEL: 50 mg/m ³ K*	TWA: 10 ppm TWA: 53 mg/m ³ STEL: 15 ppm STEL: 80 mg/m ³ vía dérmica*
Xylene 1330-20-7	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ Cutânea*	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ P*	TWA: 50 ppm TWA: 221 mg/m ³ K* Ceiling: 442 mg/m ³	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ K*	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ vía dérmica*
Cumene 98-82-8	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ Cutânea*	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ P*	TWA: 20 ppm TWA: 500 mg/m ³ K* Ceiling: 250 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ K*	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ vía dérmica*
Toluene 108-88-3	TWA: 50 ppm TWA: 192 mg/m ³ STEL: 100 ppm STEL: 384 mg/m ³ Cutânea*	TWA: 50 ppm TWA: 192 mg/m ³ STEL: 100 ppm STEL: 384 mg/m ³ P*	TWA: 50 ppm TWA: 192 mg/m ³ K* Ceiling: 384 mg/m ³	TWA: 50 ppm TWA: 192 mg/m ³ STEL: 100 ppm STEL: 384 mg/m ³ K*	TWA: 50 ppm TWA: 192 mg/m ³ STEL: 100 ppm STEL: 384 mg/m ³ vía dérmica*
Formaldehyde 50-00-0	TWA: 0.3 ppm TWA: 0.37 mg/m ³ TWA: 0.62 mg/m ³ TWA: 0.5 ppm STEL: 0.6 ppm STEL: 0.74 mg/m ³ Ceiling: 0.3 ppm Sensitizer dermal	TWA: 1 ppm TWA: 1.2 mg/m ³ STEL: 2 ppm STEL: 3 mg/m ³	TWA: 0.3 ppm TWA: 0.37 mg/m ³ S+ Ceiling: 0.74 mg/m ³	TWA: 0.62 mg/m ³ TWA: 0.5 ppm TWA: 0.37 mg/m ³ TWA: 0.3 ppm STEL: 0.6 ppm STEL: 0.74 mg/m ³ K*	TWA: 0.3 ppm TWA: 0.37 mg/m ³ STEL: 0.6 ppm STEL: 0.74 mg/m ³ Sen+
Ethylbenzene 100-41-4	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ Cutânea*	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ P*	TWA: 100 ppm TWA: 442 mg/m ³ K* Ceiling: 884 mg/m ³	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ K*	TWA: 100 ppm TWA: 441 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ vía dérmica*
Chemical name	Sweden		Switzerland		United Kingdom
Benzene, 1,2,4-trimethyl- 95-63-6	NGV: 20 ppm NGV: 100 mg/m ³ Bindande KGV: 35 ppm Bindande KGV: 170 mg/m ³				
Naphthalene 91-20-3	NGV: 10 ppm NGV: 50 mg/m ³ Vägledande KGV: 15 ppm Vägledande KGV: 80 mg/m ³		TWA: 10 ppm TWA: 50 mg/m ³ H*		
Xylene 1330-20-7	NGV: 50 ppm NGV: 221 mg/m ³ Bindande KGV: 100 ppm Bindande KGV: 442 mg/m ³ H*		TWA: 100 ppm TWA: 435 mg/m ³ STEL: 200 ppm STEL: 870 mg/m ³ H*		TWA: 50 ppm TWA: 220 mg/m ³ STEL: 100 ppm STEL: 441 mg/m ³ Sk*
Cumene 98-82-8	NGV: 10 ppm NGV: 50 mg/m ³ Bindande KGV: 50 ppm Bindande KGV: 250 mg/m ³ H*		TWA: 20 ppm TWA: 100 mg/m ³ STEL: 80 ppm STEL: 400 mg/m ³ H*		TWA: 25 ppm TWA: 125 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ Sk*
Toluene 108-88-3	NGV: 50 ppm NGV: 192 mg/m ³ Bindande KGV: 100 ppm Bindande KGV: 384 mg/m ³ H*		TWA: 50 ppm TWA: 190 mg/m ³ STEL: 200 ppm STEL: 760 mg/m ³ H*		TWA: 50 ppm TWA: 191 mg/m ³ STEL: 100 ppm STEL: 384 mg/m ³ Sk*
Formaldehyde 50-00-0	NGV: 0.3 ppm NGV: 0.37 mg/m ³ Bindande KGV: 0.6 ppm		S+ TWA: 0.3 ppm TWA: 0.37 mg/m ³		TWA: 2 ppm TWA: 2.5 mg/m ³ STEL: 2 ppm

	Bindande KGV: 0.74 mg/m ³ H* S+	STEL: 0.6 ppm STEL: 0.74 mg/m ³	STEL: 2.5 mg/m ³
Ethylbenzene 100-41-4	NGV: 50 ppm NGV: 220 mg/m ³ Bindande KGV: 200 ppm Bindande KGV: 884 mg/m ³ H*	TWA: 50 ppm TWA: 220 mg/m ³ STEL: 50 ppm STEL: 220 mg/m ³ H*	TWA: 100 ppm TWA: 441 mg/m ³ STEL: 125 ppm STEL: 552 mg/m ³ Sk*

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Xylene 1330-20-7	-	1.5 g/L (urine - Methylhippuric acid after end of work day, at the end of a work week/end of the shift)	-	1.50 mg/L - blood (Xylene) - at the end of the work shift 1.50 g/g Creatinine - urine (Methylhippuric acid) - at the end of the work shift	820 µmol/mmol Creatinine (urine - Methylhippuric acid end of shift) 1400 mg/g Creatinine (urine - Methylhippuric acid end of shift)
Cumene 98-82-8	-	-	7 mg/g Creatinine - urine (2-Phenol-2 propanol) - up to two hours after the end of work shift	-	-
Toluene 108-88-3	-	10 g/dL Hemoglobin (blood - by the first screening and once yearly) 12 g/dL Hemoglobin (blood - by the first screening and once yearly) 3.2 million/µL Erythrocytes (blood - by the first screening and once yearly) 3.8 million/µL Erythrocytes (blood - by the first screening and once yearly) 4000 Leukocytes/µL (blood - by the first screening and once yearly) 13000 Leukocytes/µL (blood - by the first screening and once yearly) 130000 Thrombocytes/µL (blood - by the first screening and once yearly) 150000 Thrombocytes/µL (blood - by the first screening and once yearly) 0.8 mg/L (urine -	1.6 mmol/mmol Creatinine - urine (Hippuric acid) - at the end of exposure or end of work shift	1.0 mg/L - blood (Toluene) - at the end of the work shift 20 ppm - final exhaled air () - during exposure 2.50 g/g Creatinine - urine (Hippuric acid) - at the end of the work shift 1.0 mg/g Creatinine - urine (o-Cresol) - at the end of the work shift	1.6 µmol/mmol Creatinine (urine - o-Cresol end of shift) 1000 µmol/mmol Creatinine (urine - Hippuric acid end of shift) 1.5 mg/g Creatinine (urine - o-Cresol end of shift) 1600 mg/g Creatinine (urine - Hippuric acid end of shift)

		o-Cresol after end of work day, at the end of a work week/end of the shift)			
Ethylbenzene 100-41-4	-	-	2000 mg/g Creatinine - urine (Mandelic acid and Phenylglyoxylic acid - total) - at the end of exposure or end of work shift	1.50 mg/L - blood (Ethylbenzene) - during exposure 1.50 g/g Creatinine - urine (Mandelic acid) - at the end of the work shift and at the end of the working week	1100 µmol/mmol Creatinine (urine - Mandelic acid end of shift) 1500 mg/g Creatinine (urine - Mandelic acid end of shift)
Chemical name	Denmark	Finland	France	Germany	Germany
Benzene, 1,2,4-trimethyl- 95-63-6	-	-	600 mg/g creatinine - urine (Total Dimethylbenzoic acids (after hydrolysis) in urine) - end of shift after several shifts	400 mg/g Creatinine (urine - Dimethylbenzoic acid (sum of all isomers after hydrolysis) end of shift) 400 mg/g Creatinine (urine - Dimethylbenzoic acid (sum of all isomers after hydrolysis) for long-term exposures: at the end of the shift after several shifts) 400 mg/g Creatinine - BAT (end of exposure or end of shift) urine 400 mg/g Creatinine - BAT (for long-term exposures: at the end of the shift after several shifts) urine	400 mg/g Creatinine (urine - Dimethylbenzoic acid (sum of all isomers after hydrolysis) end of shift) 400 mg/g Creatinine (urine - Dimethylbenzoic acid (sum of all isomers after hydrolysis) for long-term exposures: at the end of the shift after several shifts)
Naphthalene 91-20-3	-	-	-	35 µg/L - BAR (end of exposure or end of shift) urine 35 µg/L - BAR (for long-term exposures: at the end of the shift after several shifts) urine 4000 µg/L - (end of exposure or end of shift) - urine 13500 µg/L - (end of exposure or end of shift) - urine 23300 µg/L - (end of exposure or end of shift) - urine 34200 µg/L - (end of exposure or end of shift) - urine 30 µg/L - (end of exposure or end of	-

				shift) - urine 60 µg/L - (end of exposure or end of shift) - urine 175 µg/L - (end of exposure or end of shift) - urine 280 µg/L - (end of exposure or end of shift) - urine 390 µg/L - (end of exposure or end of shift) - urine 220 µg/L - (end of exposure or end of shift) - urine 500 µg/L - (end of exposure or end of shift) - urine 1500 µg/L - (end of exposure or end of shift) - urine 2300 µg/L - (end of exposure or end of shift) - urine 3300 µg/L - (end of exposure or end of shift) - urine	
Xylene 1330-20-7	-	5.0 mmol/L (urine - Methylhippuric acid after the shift)	1500 mg/g creatinine - urine (Methylhippuric acid) - end of shift	2000 mg/L (urine - Methylhippuric(tolur-)acid (all isomers) end of shift) 2000 mg/L - BAT (end of exposure or end of shift) urine	2000 mg/L (urine - Methylhippuric(tolur-)acid (all isomers) end of shift)
Cumene 98-82-8	-	-	-	10 mg/g Creatinine (urine - 2-Phenyl-2-propanol (after hydrolysis) end of shift) 10 mg/g Creatinine - BAT (end of exposure or end of shift) urine	10 mg/g Creatinine (urine - 2-Phenyl-2-propanol (after hydrolysis) end of shift)
Toluene 108-88-3	-	500 nmol/L (blood - Toluene in the morning after a working day)	1 mg/L - venous blood (Toluene) - end of shift 2500 mg/g creatinine - urine (Hippuric acid) - end of shift	600 µg/L (whole blood - Toluene immediately after exposure) 75 µg/L (urine - Toluene end of shift) 1.5 mg/L (urine - o-Cresol (after hydrolysis) for long-term exposures: at the end of the shift after several shifts) 1.5 mg/L (urine - o-Cresol (after hydrolysis) end of shift) 600 µg/L - BAT	600 µg/L (whole blood - Toluene immediately after exposure) 75 µg/L (urine - Toluene end of shift) 1.5 mg/L (urine - o-Cresol (after hydrolysis) for long-term exposures: at the end of the shift after several shifts) 1.5 mg/L (urine - o-Cresol (after hydrolysis) end of shift)

				(immediately after exposure) blood 75 µg/L - BAT (end of exposure or end of shift) urine 1.5 mg/L - BAT (for long-term exposures: at the end of the shift after several shifts) urine 1.5 mg/L - BAT (end of exposure or end of shift) urine	
Ethylbenzene 100-41-4	-	5.2 mmol/L (urine - Mandelic acid after the shift after a working week or exposure period)	1500 mg/g creatinine - urine (Mandelic acid) - end of shift at end of workweek	250 mg/g Creatinine (urine - Mandelic acid plus Phenylglyoxylic acid end of shift) 250 mg/g Creatinine - BAT (end of exposure or end of shift) urine 130 mg/g Creatinine - (end of exposure or end of shift) - urine 250 mg/g Creatinine - (end of exposure or end of shift) - urine 330 mg/g Creatinine - (end of exposure or end of shift) - urine 670 mg/g Creatinine - (end of exposure or end of shift) - urine 1300 mg/g Creatinine - (end of exposure or end of shift) - urine	250 mg/g Creatinine (urine - Mandelic acid plus Phenylglyoxylic acid end of shift)
Chemical name	Hungary	Ireland	Italy	Italy REL	
Naphthalene 91-20-3	-	-	-	- () - end of shift	
Xylene 1330-20-7	1500 mg/g Creatinine (urine - Methyl hippuric acid end of shift) 860 µmol/mmol Creatinine (urine - Methyl hippuric acid end of shift)	1.5 g/g Creatinine (urine - Methylhippuric acids end of shift)	-	1.5 g/g Creatinine - urine (Methylhippuric acid) - end of shift	
Toluene 108-88-3	1 mg/g Creatinine (urine - o-Cresol end of shift) 1 µmol/mmol Creatinine (urine - o-Cresol end of shift)	0.02 mg/L (blood - Toluene prior to last shift of workweek) 0.03 mg/L (urine - Toluene end of shift) 0.3 mg/g Creatinine (urine - o-Cresol end of shift)	-	0.3 mg/g Creatinine - urine (o-Cresol (with hydrolysis)) - end of shift 0.03 mg/L - urine (Toluene) - end of shift 0.02 mg/L - blood (Toluene) - prior to last shift of workweek	
Ethylbenzene 100-41-4	1500 mg/g Creatinine (urine - Mandelic acid at end of workweek, end of	0.7 g/g Creatinine (urine - sum of Mandelic acid and Phenylglyoxylic acid end	-	0.15 g/g Creatinine - urine (Sum of Mandelic acid and Phenylglyoxylic acid)	

	shift) 1110 µmol/mmol Creatinine (urine - Mandelic acid at end of workweek, end of shift)	of shift at end of workweek) 0.7 g (end-exhaled air - not critical)		- end of shift at end of workweek
Chemical name	Latvia	Luxembourg	Romania	Slovakia
Xylene 1330-20-7	-	-	3 g/L - urine (Methylhippuric acid) - end of shift	1.5 mg/L (blood - Xylene end of exposure or work shift) 2000 mg/L (urine - Methylhippuric acid end of exposure or work shift)
Cumene 98-82-8	7 µg/g Creatinine - urine (Cumene) - no later than two hours after the end of the shift	-	-	10.6 mg/L (urine - 2-Phenylpropane end of exposure or work shift)
Toluene 108-88-3	1.6 g/g Creatinine - urine (Hippuric acid) - end of shift 0.05 mg/L - blood (Toluene) - end of shift	-	2 g/L - urine (Hippuric acid) - end of shift 3 mg/L - urine (o-Cresol) - end of shift	600 µg/L (blood - Toluene end of exposure or work shift) 1.5 mg/L (urine - o-Cresol after all work shifts) 1.5 mg/L (urine - o-Cresol end of exposure or work shift) 1600 mg/g creatinine (- Hippuric acid end of exposure or work shift)
Ethylbenzene 100-41-4	-	-	1.5 g/g Creatinine - urine (Mandelic acid) - end of work week	12 mg/L (urine - 2 and 4-Ethylphenol end of exposure or work shift) 1600 mg/L (urine - Mandelic acid and Phenylglycolic acid end of exposure or work shift)
Chemical name	Slovenia	Spain	Switzerland	United Kingdom
Benzene, 1,2,4-trimethyl- 95-63-6	400 mg/g Creatinine - urine (Dimethylbenzoic acid (all isomers after hydrolysis)) - at the end of the work shift; for long-term exposure: at the end of the work shift after several consecutive workdays	-	-	-
Xylene 1330-20-7	2 g/L - urine (Methylhippuric acid (all isomers)) - at the end of the work shift	1 g/g Creatinine (urine - Methylhippuric acids end of shift)	2 g/L (urine - Methylhippuric acid end of shift)	650 mmol/mol creatinine - urine (Methyl hippuric acid) - post shift
Cumene 98-82-8	10 mg/g Creatinine - urine (2-Phenyl-2-propanol (after hydrolysis)) - at the end of the work shift	7 mg/g Creatinine (urine - 2-Phenyl-2-propanol end of shift)	20 mg/g creatinine (urine - 2-Phenyl-2-propanol after hydrolysis end of shift)	-
Toluene 108-88-3	600 µg/L - blood (Toluene) - immediately after exposure 1.5 mg/L - urine (o-Cresol (after hydrolysis)) - at the end of the work shift; for long-term exposure: at the end of the work shift after several consecutive workdays	0.6 mg/L (urine - o-Cresol end of shift) 0.05 mg/L (blood - Toluene start of last shift of workweek) 0.08 mg/L (urine - Toluene end of shift)	600 µg/L (whole blood - Toluol end of shift) 2 g/g creatinine (urine - Hippuric acid end of shift, and after several shifts (for long-term exposures)) 0.5 mg/L (urine - o-Cresol end of shift, and after several shifts (for long-term exposures))	-

	75 µg/L - urine (Toluene) - at the end of the work shift		75 µg/L (urine - Toluol end of shift)	
Ethylbenzene 100-41-4	250 mg/g Creatinine - urine (Mandelic acid and Phenylglyoxylic acid) - at the end of the work shift	700 mg/g Creatinine (urine - Mandelic acid plus Phenylglyoxylic acid end of workweek)	600 mg/g creatinine (urine - Mandelic acid and Phenylglyoxylacid end of shift)	-

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection If there is a risk of contact: Tight sealing safety goggles. Eye protection must conform to standard EN 166.

Hand protection If there is a risk of contact: Wear suitable gloves. Impervious gloves. Gloves must conform to standard EN 374. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.

Skin and body protection If there is a risk of contact: Wear suitable protective clothing (EN ISO 6529). Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Liquid
Color	Yellow
Odor	Aromatic Hydrocarbons
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No data available
Initial boiling point and boiling range		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Flash point	52 °C	Pensky-Martens Closed Cup (PMCC)
Autoignition temperature		No data available
Decomposition temperature		No data available
pH		No data available

pH (as aqueous solution)		No data available
Kinematic viscosity	1.9 cSt @ 40 °C	ASTM D445
Dynamic viscosity		No data available
Water solubility		No data available
Solubility(ies)		No data available
Partition coefficient		No data available
Vapor pressure		No data available
Relative density	0.9321	No data available
Bulk density		No data available
Liquid Density		No data available
Vapor density		No data available
Particle characteristics		
Particle Size		No data available
Particle Size Distribution		No data available

9.2. Other information

Pour Point <-60 °C [ASTM D 97]

9.2.1. Information with regard to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity None under normal use conditions.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure**

Product Information

Inhalation	Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. May cause drowsiness or dizziness.
Eye contact	Specific test data for the substance or mixture is not available. May cause irritation. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Repeated exposure may cause skin dryness or cracking. Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Redness. May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
-----------------	---

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral)	1,079.60 mg/kg
ATEmix (dermal)	1,735.40 mg/kg
ATEmix (inhalation-vapor)	14.5828 mg/l

Unknown acute toxicity

28.53 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Νιτρικός 2-αιθυλεξυλεστέρας 27247-96-7	> 9600 mg/kg (Rat)	> 4800 mg/kg (Rabbit)	> 14 mg/L (Rat) 4 h
Hydrogenated base oil 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
Hydrogenated base oil 64742-94-5	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 590 mg/m ³ (Rat) 4 h
Benzene, 1,2,4-trimethyl- 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m ³ (Rat) 4 h
Naphthalene 91-20-3	= 1110 mg/kg (Rat)	= 1120 mg/kg (Rabbit)	> 0.4 mg/L (Rat) 4 h
Xylene 1330-20-7	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h
Cumene 98-82-8	= 1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	> 3577 ppm (Rat) 6 h
Toluene 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
Formaldehyde 50-00-0	= 100 mg/kg (Rat)	> 2000 mg/kg (Rat)	< 463 ppm (Rat) 4 h
Ethylbenzene 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Classification based on data available for ingredients. Causes skin irritation.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity Contains a known or suspected mutagen. Classification based on data available for ingredients. May cause genetic defects.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as mutagenic.

Chemical name	European Union
Hydrogenated base oil	Muta. 1B
Formaldehyde	Muta. 2

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	European Union
Naphthalene	Carc. 2
Formaldehyde	Carc. 1B

Reproductive toxicity No information available.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
phenol, 4-dodecyl-, branched	Repr. 1B
Toluene	Repr. 2

STOT - single exposure May cause respiratory irritation. May cause drowsiness or dizziness.

STOT - repeated exposure No information available.

Aspiration hazard May be fatal if swallowed and enters airways.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Νιτρικός 2-αιθυλεξυλεστέρας 27247-96-7	-	LC50: =2mg/L (96h, Danio rerio)	-	-
Hydrogenated base oil 64742-95-6	-	LC50: =9.22mg/L (96h, Oncorhynchus mykiss)	-	EC50: =6.14mg/L (48h, Daphnia magna)

Hydrogenated base oil 64742-94-5	-	LC50: =19mg/L (96h, Pimephales promelas) LC50: =2.34mg/L (96h, Oncorhynchus mykiss) LC50: =1740mg/L (96h, Lepomis macrochirus) LC50: =45mg/L (96h, Pimephales promelas) LC50: =41mg/L (96h, Pimephales promelas)	-	EC50: =0.95mg/L (48h, Daphnia magna)
Benzene, 1,2,4-trimethyl- 95-63-6	-	LC50: 7.19 - 8.28mg/L (96h, Pimephales promelas)	-	EC50: =6.14mg/L (48h, Daphnia magna)
Naphthalene 91-20-3	-	LC50: 0.91 - 2.82mg/L (96h, Oncorhynchus mykiss)	-	EC50: 1.09 - 3.4mg/L (48h, Daphnia magna)
Xylene 1330-20-7	-	LC50: =13.4mg/L (96h, Pimephales promelas)	-	EC50: =3.82mg/L (48h, water flea) LC50: =0.6mg/L (48h, Gammarus lacustris)
Cumene 98-82-8	EC50: =2.6mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 6.04 - 6.61mg/L (96h, Pimephales promelas) LC50: =4.8mg/L (96h, Oncorhynchus mykiss) LC50: =2.7mg/L (96h, Oncorhynchus mykiss) LC50: =5.1mg/L (96h, Poecilia reticulata)	-	EC50: =0.6mg/L (48h, Daphnia magna) EC50: 7.9 - 14.1mg/L (48h, Daphnia magna)
Toluene 108-88-3	EC50: >433mg/L (96h, Pseudokirchneriella subcapitata) EC50: =12.5mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 15.22 - 19.05mg/L (96h, Pimephales promelas) LC50: =12.6mg/L (96h, Pimephales promelas) LC50: 5.89 - 7.81mg/L (96h, Oncorhynchus mykiss) LC50: 14.1 - 17.16mg/L (96h, Oncorhynchus mykiss) LC50: =5.8mg/L (96h, Oncorhynchus mykiss) LC50: 11.0 - 15.0mg/L (96h, Lepomis macrochirus) LC50: =54mg/L (96h, Oryzias latipes) LC50: =28.2mg/L (96h, Poecilia reticulata) LC50: 50.87 - 70.34mg/L (96h, Poecilia reticulata)	-	EC50: 5.46 - 9.83mg/L (48h, Daphnia magna) EC50: =11.5mg/L (48h, Daphnia magna)
Formaldehyde 50-00-0	-	LC50: 22.6 - 25.7mg/L (96h, Pimephales promelas) LC50: =1510µg/L (96h, Lepomis macrochirus) LC50: =41mg/L (96h, Brachydanio rerio) LC50: 0.032 - 0.226mL/L (96h, Oncorhynchus mykiss) LC50: 100 - 136mg/L	-	LC50: =2mg/L (48h, Daphnia magna) EC50: 11.3 - 18mg/L (48h, Daphnia magna)

		(96h, Oncorhynchus mykiss) LC50: 23.2 - 29.7mg/L (96h, Pimephales promelas)		
Ethylbenzene 100-41-4	EC50: >438mg/L (96h, Pseudokirchneriella subcapitata)	LC50: 11.0 - 18.0mg/L (96h, Oncorhynchus mykiss)	-	EC50: 1.8 - 2.4mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential**Bioaccumulation****Component Information**

Chemical name	Partition coefficient
Νιτρικός 2-αιθυλεξυλεστέρας	5.24
Hydrogenated base oil	6.5
Benzene, 1,2,4-trimethyl-	3.63
Naphthalene	3.4
Xylene	3.15
Benzene, ethylenated, residues, distn. lights	3160000
Cumene	3.55
Toluene	2.73
Formaldehyde	0.35
Ethylbenzene	3.6

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment**PBT and vPvB assessment**

Chemical name	PBT and vPvB assessment
Νιτρικός 2-αιθυλεξυλεστέρας 27247-96-7	The substance is not PBT / vPvB
Hydrogenated base oil 64742-95-6	The substance is not PBT / vPvB
Hydrogenated base oil 64742-94-5	The substance is not PBT / vPvB
Benzene, 1,2,4-trimethyl- 95-63-6	The substance is not PBT / vPvB PBT assessment does not apply
Naphthalene 91-20-3	The substance is not PBT / vPvB
Xylene 1330-20-7	The substance is not PBT / vPvB
Cumene 98-82-8	The substance is not PBT / vPvB
Toluene 108-88-3	The substance is not PBT / vPvB PBT assessment does not apply
Formaldehyde 50-00-0	The substance is not PBT / vPvB PBT assessment does not apply
Ethylbenzene 100-41-4	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.
Waste codes / waste designations according to EWC / AVV	According to the European Waste Catalog, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IMDG

14.1 UN number or ID number	UN1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (Benzene, 1,2,4-trimethyl-, 1,2-Diaminoethane)
14.3 Transport hazard class(es)	3
14.4 Packing group	III
Description	UN1993, FLAMMABLE LIQUID, N.O.S. (Benzene, 1,2,4-trimethyl-, 1,2-Diaminoethane), 3, III, (52°C C.C.), Marine pollutant
14.5 Environmental hazards	Yes
14.6 Special Precautions for Users	
Special Provisions	223, 274, 955
EmS-No	F-E, S-E
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number	UN1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (Benzene, 1,2,4-trimethyl-, 1,2-Diaminoethane)
14.3 Transport hazard class(es)	3
14.4 Packing group	III
Description	UN1993, FLAMMABLE LIQUID, N.O.S. (Benzene, 1,2,4-trimethyl-, 1,2-Diaminoethane), 3, III, Environmentally Hazardous
14.5 Environmental hazards	Yes
14.6 Special Precautions for Users	
Special Provisions	None
Classification code	F1

ADR

14.1 UN number or ID number	UN1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (Benzene, 1,2,4-trimethyl-, 1,2-Diaminoethane)
14.3 Transport hazard class(es)	3
14.4 Packing group	III
Description	UN1993, FLAMMABLE LIQUID, N.O.S. (Benzene, 1,2,4-trimethyl-, 1,2-Diaminoethane), 3, III, Environmentally Hazardous
14.5 Environmental hazards	Yes
14.6 Special Precautions for Users	

Special Provisions 274, 601
 Classification code F1
 Tunnel restriction code (D/E)

IATA

14.1 UN number or ID number UN1993
 14.2 UN proper shipping name Flammable liquid, n.o.s. (Benzene, 1,2,4-trimethyl-, 1,2-Diaminoethane)
 14.3 Transport hazard class(es) 3
 14.4 Packing group III
 Description UN1993, Flammable liquid, n.o.s. (Benzene, 1,2,4-trimethyl-, 1,2-Diaminoethane), 3, III
 14.5 Environmental hazards Yes
 14.6 Special Precautions for Users
 Special Provisions A3
 ERG Code 3L
 Note: None

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****France****Occupational Illnesses (R-463-3, France)**

Chemical name	French RG number
Hydrogenated base oil 64742-95-6	RG 84
Hydrogenated base oil 64742-94-5	RG 84
Benzene, 1,2,4-trimethyl- 95-63-6	RG 84
Xylene 1330-20-7	RG 4bis, RG 84
Cumene 98-82-8	RG 84
Toluene 108-88-3	RG 4bis, RG 84
Formaldehyde 50-00-0	RG 43
Ethylbenzene 100-41-4	RG 84

Germany

Water hazard class (WGK) strongly hazardous to water (WGK 3)

Netherlands

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Xylene	-	-	Development Category 2
phenol, 4-dodecyl-, branched	-	-	Fertility Category 1B
Toluene	-	-	Development Category 2
Formaldehyde	Present	-	-

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents

at work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Hydrogenated base oil - 64742-95-6	28. 29. 75.	
Benzene, 1,2,4-trimethyl- - 95-63-6	75.	
Naphthalene - 91-20-3	75.	
Xylene - 1330-20-7	75.	
phenol, 4-dodecyl-, branched - 210555-94-5	30. 75.	
Toluene - 108-88-3	48. 75.	
Formaldehyde - 50-00-0	72. 28. 75.	

Persistent Organic Pollutants

Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

P5a - FLAMMABLE LIQUIDS

P5b - FLAMMABLE LIQUIDS

P5c - FLAMMABLE LIQUIDS

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Named dangerous substances per Seveso Directive (2012/18/EU)

Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
Hydrogenated base oil - 64742-95-6		25000
Hydrogenated base oil - 64742-94-5		25000
Formaldehyde - 50-00-0	5	50

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Formaldehyde - 50-00-0	001 Product type 22 (200-001-8)

EU - Water Framework Directive (2000/60/EC)

Chemical name	EU - Water Framework Directive (2000/60/EC)
Naphthalene - 91-20-3	Priority substance

EU - Environmental Quality Standards (2008/105/EC)

Chemical name	EU - Environmental Quality Standards (2008/105/EC)
Naphthalene - 91-20-3	Priority substance

International Inventories

Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report

No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H225 - Highly flammable liquid and vapor
 H226 - Flammable liquid and vapor
 H301 - Toxic if swallowed
 H302 - Harmful if swallowed
 H304 - May be fatal if swallowed and enters airways
 H311 - Toxic in contact with skin
 H312 - Harmful in contact with skin
 H314 - Causes severe skin burns and eye damage
 H315 - Causes skin irritation
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H319 - Causes serious eye irritation
 H331 - Toxic if inhaled
 H332 - Harmful if inhaled
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H335 - May cause respiratory irritation
 H336 - May cause drowsiness or dizziness
 H340 - May cause genetic defects
 H341 - Suspected of causing genetic defects
 H350 - May cause cancer
 H351 - Suspected of causing cancer
 H360F - May damage fertility
 H361d - Suspected of damaging the unborn child
 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

Legend

ATE: Acute Toxicity Estimate

SVHC: Substances of Very High Concern for Authorization:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals

vPvB: Very Persistent and very Bioaccumulative (vPvB) Chemicals

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method

Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Issuing Date 27-Jul-2022

Revision Date 27-Jul-2022

Revision Note Initial Release.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet