



SAFETY DATA SHEET

Version #: 01
Issue date: 23-September-2023
Revision date: -
Supersedes date: -

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

1.1. Product identifier

Trade name or designation of the mixture STEEL-IT 6811 Equipment Cleaning Blend

Registration number -

Synonyms None.

SDS number SDS-6811

Product code FGTH6811-G (gallon), FGTH6811-5G (5-gallon pail), FGTH6811-DM (55-gallon drum)

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

Identified uses Equipment Cleaning Blend for STEEL-IT 4907 (A&B) and 4210 (A&B) epoxy products.

Uses advised against Uses other than the recommended use.

1.3. Details of the supplier of the safety data sheet

Manufacturer Stainless Steel Coatings, Inc.

Address 835 Sterling Road, Lancaster MA 01523-2915, USA

Telephone +1 (978) 365-9828

E-mail sds@STEEL-IT.com

Supplier HM Industrieservice GmbH

Address Großer Sand 3
76698 Ubstadt-Weiher, Germany

Telephone +49 7251 44127-0

Fax +49 7251 44127-29

E-mail info@hm-industrie.de

Website www.hm-industrie.de

1.4. Emergency telephone number CHEMTREC:
+1-703-527-3887 (International)

General in EU 112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Austria National Poisons Information Centre +431 406 4343 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Belgium National Poisons Control Centre 070 245 245 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Bulgaria National Toxicological Information Centre +359 2 9154 233 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Croatia Poisons Information Centre +385 1 2348 342 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

Cyprus Poison Centre 1401 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Czech Republic National Poisons Information Centre +420 224 919 293, or +420 224 915 402 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

Denmark National Poisons Control Centre +45 82 12 12 12 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Estonia National Poisons Information Centre	16662 or abroad: (+372) 626 9390 (Monday 9:00AM to Saturday 9:00AM (closed on Sundays and on national holidays). SDS/Product information may not be available for the Emergency Service.)
Finland National Poison Information Centre	(09) 471 977 (direct) or (09) 4711 (exchange) (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
France National Poisons Control Centre	ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Greece Poison Information Centre telephone number	(0030) 2107793777 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Hungary National Emergency Phone Number	+36-80-201-199 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Iceland Poison Centre	(+354) 543 2222 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Latvia Emergency medical aid	113
Latvia Poison and Drug Information Centre	+371 67042473 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Lithuania Neatidėliotina informacija apsinuodijus	+370 5 236 20 52 or +37068753378 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
Malta Accident and Emergency Department	2545 4030 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
Netherlands National Poisons Information Centre (NVIC)	NVIC: +31 (0)88 755 8000 (Only for the purpose of informing medical personnel in cases of acute intoxications)
Norway Norwegian Poison Information Centre	22 59 13 00 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Portugal Poison Centre	800 250 250 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Romania Biroul RSI si Informare Toxicologica	021.318.36.06 (Available 8:00AM-3:00PM. SDS/Product information may not be available for the Emergency Service.)
Slovakia National Toxicological Information Centre	+421 2 5477 4166 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Spain Toxicology Information Service	+ 34 91 562 04 20 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Sweden National Poison Information Centre	112 - and ask for Poison Information (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Switzerland Tox Info Suisse	145 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Ireland National Poisons Information Centre	353 (1) 809 2566 Healthcare Professionals: 24 hours, 7 days a week

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 2	H225 - Highly flammable liquid and vapour.
-------------------	------------	--

Health hazards

Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Carcinogenicity	Category 2	H351 - Suspected of causing cancer.
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.
Specific target organ toxicity - repeated exposure	Category 2 (central nervous system, kidneys, liver)	H373 - May cause damage to organs (central nervous system, kidneys, liver) through prolonged or repeated exposure.
Aspiration hazard	Category 1	H304 - May be fatal if swallowed and enters airways.

2.2. Label elements

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

Contains: 1-Methoxy-2-propanol, 4-methylpentan-2-one; isobutyl methyl ketone, Ethylbenzene, m-Xylene, o-Xylene, p-Xylene

Hazard pictograms



Signal word

Danger

Hazard statements

H225	Highly 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.
H351	Suspected of causing cancer.
H373	May cause damage to organs (central nervous system, kidneys, liver) through prolonged or repeated exposure.

Precautionary statements

Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTRE/doctor.
P331	Do NOT induce vomiting.
P370 + P378	In case of fire: Use water fog, foam, dry chemical powder, carbon dioxide to extinguish.

Storage

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

Disposal

Not assigned.

Supplemental information on the label

None.

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
 The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight.
 The mixture does not contain any substances having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1% by weight.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
1-Methoxy-2-propanol	30 - 40	107-98-2 203-539-1	-	603-064-00-3	#

Classification: Flam. Liq. 3;H226, STOT SE 3;H336

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
4-methylpentan-2-one; isobutyl methyl ketone	30 - 40	108-10-1 203-550-1	-	606-004-00-4	#
<p>Classification: Flam. Liq. 2;H225, Acute Tox. 4;H332;(ATE: 11 mg/l), Eye Irrit. 2;H319, Carc. 2;H351, STOT SE 3;H336</p> <p>Supplemental Hazard Statement(s): EUH066</p>					
m-Xylene	10 - 20	108-38-3 203-576-3	-	601-022-00-9	#
<p>Classification: Flam. Liq. 3;H226, Acute Tox. 4;H312;(ATE: 1100 mg/kg bw), Acute Tox. 4;H332;(ATE: 11 mg/l), Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H335;H336, STOT RE 2;H373, Asp. Tox. 1;H304</p>					
Ethylbenzene	5 - 10	100-41-4 202-849-4	-	601-023-00-4	#
<p>Classification: Flam. Liq. 2;H225, Acute Tox. 4;H332;(ATE: 17,4 mg/l), STOT RE 2;H373, Asp. Tox. 1;H304, Aquatic Chronic 3;H412</p>					
p-Xylene	5 - 10	106-42-3 203-396-5	-	601-022-00-9	#
<p>Classification: Flam. Liq. 3;H226, Acute Tox. 4;H312;(ATE: 1100 mg/kg bw), Acute Tox. 4;H332;(ATE: 20 mg/l), Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H335;H336, STOT RE 2;H373, Asp. Tox. 1;H304</p>					
o-Xylene	1 - 10	95-47-6 202-422-2	-	601-022-00-9	#
<p>Classification: Flam. Liq. 3;H226, Acute Tox. 4;H312;(ATE: 1100 mg/kg bw), Acute Tox. 4;H332;(ATE: 11 mg/l), Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H335;H336, STOT RE 2;H373, Asp. Tox. 1;H304</p>					
Toluene	< 0,2	108-88-3 203-625-9	-	601-021-00-3	#
<p>Classification: Flam. Liq. 2;H225, Skin Irrit. 2;H315, Repr. 2;H361d, STOT SE 3;H336, STOT RE 2;H373, Asp. Tox. 1;H304, Aquatic Chronic 3;H412</p>					

List of abbreviations and symbols that may be used above

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

ATE: Acute toxicity estimate.

Composition comments

The full text for all H-statements is displayed in section 16.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. 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 exposed or concerned: Get medical advice/attention. 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 or dizziness. Narcosis. Headache. Nausea, vomiting. Abdominal pain. Diarrhoea. Behavioural changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. Jaundice. Prolonged exposure may cause chronic effects.

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	Highly flammable liquid and vapour.
5.1. Extinguishing media	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
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. During fire, gases hazardous to health may be formed such as: Carbon oxides.
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	Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapours/spray. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
For emergency responders	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. Do not breathe mist/vapours/spray. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained.
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.
6.3. Methods and material for containment and cleaning up	<p>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.</p> <p>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. Retain and dispose of contaminated wash water.</p> <p>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.</p> <p>Never return spills to original containers for re-use.</p>
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	<p>Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment.</p> <p>Do not breathe mist/vapours/spray. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.</p>
---	---

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see section 10 of the SDS).

TRGS 510 storage class: 3.

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

ANNEX 1, PART 1 Categories of dangerous substances
Hazard categories in accordance with Regulation (EC) No 1272/2008
- P5a, b or c FLAMMABLE LIQUIDS (Lower-tier requirements = 50 tonnes; Upper-tier requirements = 200 tonnes)

7.3. Specific end use(s)

Equipment Cleaning Blend for STEEL-IT 4907 (A&B) and 4210 (A&B) epoxy products. Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List Components

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	Ceiling	187 mg/m ³
		50 ppm
	MAK	187 mg/m ³
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)		50 ppm
	MAK	83 mg/m ³
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	208 mg/m ³
		50 ppm
	Ceiling	880 mg/m ³
m-Xylene (CAS 108-38-3)		200 ppm
	MAK	440 mg/m ³
		100 ppm
o-Xylene (CAS 95-47-6)	MAK	221 mg/m ³
		50 ppm
	STEL	442 mg/m ³
p-Xylene (CAS 106-42-3)		100 ppm
	MAK	221 mg/m ³
		50 ppm
Toluene (CAS 108-88-3)	STEL	442 mg/m ³
		100 ppm
	MAK	190 mg/m ³
	50 ppm	
	STEL	380 mg/m ³
		100 ppm

Belgium. OEL. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1 - Chemical agents, as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	369 mg/m ³

Belgium. OEL. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1 - Chemical agents, as amended

Components	Type	Value
		100 ppm
	TWA	184 mg/m ³
		50 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m ³
		50 ppm
	TWA	83 mg/m ³
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	551 mg/m ³
		125 ppm
	TWA	87 mg/m ³
		20 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
p-Xylene (CAS 106-42-3)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m ³
		100 ppm
	TWA	77 mg/m ³
		20 ppm

Bulgaria. OELs. Ordinance No 13 on protection of workers against risks of exposure to chemical agents at work, as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m ³
		150 ppm
	TWA	375 mg/m ³
		100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	200 mg/m ³
		50 mg/m ³
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m ³
		435 mg/m ³
m-Xylene (CAS 108-38-3)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m ³
		100 ppm

Bulgaria. OELs. Ordinance No 13 on protection of workers against risks of exposure to chemical agents at work, as amended

Components	Type	Value
p-Xylene (CAS 106-42-3)	TWA	221 mg/m ³ 50 ppm
	STEL	442 mg/m ³ 100 ppm
	TWA	221 mg/m ³ 50 ppm
	STEL	384 mg/m ³ 100 ppm
Toluene (CAS 108-88-3)	TWA	192 mg/m ³ 50 ppm
	STEL	384 mg/m ³ 100 ppm
	TWA	192 mg/m ³ 50 ppm

Croatia. OELs (GVI). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and Biological Limit Values, Annex I (NN 91/2018), as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	MAC	375 mg/m ³ 100 ppm
	STEL	568 mg/m ³ 150 ppm
	MAC	83 mg/m ³ 20 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m ³ 50 ppm
	MAC	442 mg/m ³ 100 ppm
	STEL	884 mg/m ³ 200 ppm
Ethylbenzene (CAS 100-41-4)	MAC	221 mg/m ³ 50 ppm
	STEL	442 mg/m ³ 100 ppm
	MAC	221 mg/m ³ 50 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m ³ 100 ppm
	MAC	221 mg/m ³ 50 ppm
	STEL	442 mg/m ³ 100 ppm
o-Xylene (CAS 95-47-6)	MAC	221 mg/m ³ 50 ppm
	STEL	442 mg/m ³ 100 ppm
	MAC	221 mg/m ³ 50 ppm
p-Xylene (CAS 106-42-3)	STEL	442 mg/m ³ 100 ppm
	MAC	221 mg/m ³ 50 ppm
	STEL	442 mg/m ³ 100 ppm
Toluene (CAS 108-88-3)	MAC	192 mg/m ³ 50 ppm
	STEL	384 mg/m ³ 100 ppm
	MAC	192 mg/m ³ 50 ppm

Cyprus. OELs. Occupational Exposure Limit Values of Chemicals at Work (Safety and Health at Work (Chem. Agents) Reg., Ann. 1, R.A.A. 268/2001, as amended)

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m ³

Cyprus. OELs. Occupational Exposure Limit Values of Chemicals at Work (Safety and Health at Work (Chem. Agents) Reg., Ann. 1, R.A.A. 268/2001, as amended)

Components	Type	Value
		150 ppm
	TWA	375 mg/m ³
		100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m ³
		50 ppm
	TWA	83 mg/m ³
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m ³
		200 ppm
	TWA	442 mg/m ³
		100 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
p-Xylene (CAS 106-42-3)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m ³
		100 ppm
	TWA	192 mg/m ³
		50 ppm

Czech Republic. Occupational exposure limit values of chemicals at work (Decree on protection of health at work, 361/2007, Annex 2, Part A & Annex 3, Part A, as amended)

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	Ceiling	550 mg/m ³
	TWA	270 mg/m ³
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Ceiling	200 mg/m ³
	TWA	80 mg/m ³
Ethylbenzene (CAS 100-41-4)	Ceiling	500 mg/m ³
	TWA	200 mg/m ³
m-Xylene (CAS 108-38-3)	Ceiling	400 mg/m ³
	TWA	200 mg/m ³
o-Xylene (CAS 95-47-6)	Ceiling	400 mg/m ³
	TWA	200 mg/m ³
p-Xylene (CAS 106-42-3)	Ceiling	400 mg/m ³
	TWA	200 mg/m ³
Toluene (CAS 108-88-3)	Ceiling	384 mg/m ³
	TWA	192 mg/m ³

Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, Annex 2

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	TLV	185 mg/m3
		50 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	TLV	83 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	TLV	217 mg/m3
		50 ppm
m-Xylene (CAS 108-38-3)	TLV	109 mg/m3
		25 ppm
o-Xylene (CAS 95-47-6)	TLV	109 mg/m3
		25 ppm
p-Xylene (CAS 106-42-3)	TLV	109 mg/m3
		25 ppm
Toluene (CAS 108-88-3)	TLV	94 mg/m3
		25 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m3
		150 ppm
	TWA	375 mg/m3
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)		100 ppm
	STEL	208 mg/m3
	TWA	50 ppm
Ethylbenzene (CAS 100-41-4)		83 mg/m3
	STEL	884 mg/m3
	TWA	200 ppm
m-Xylene (CAS 108-38-3)		442 mg/m3
	STEL	450 mg/m3
	TWA	100 ppm
o-Xylene (CAS 95-47-6)		200 mg/m3
	STEL	450 mg/m3
	TWA	50 ppm
p-Xylene (CAS 106-42-3)		200 mg/m3
	STEL	450 mg/m3
	TWA	50 ppm
Toluene (CAS 108-88-3)		200 mg/m3
	STEL	384 mg/m3
	TWA	100 ppm
		192 mg/m3
		50 ppm

Finland. HTP-arvot, App 3., Binding Limit Values, Social Affairs and Ministry of Health

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	560 mg/m3 150 ppm
	TWA	370 mg/m3 100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	210 mg/m3 50 ppm
	TWA	80 mg/m3 20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	880 mg/m3 200 ppm
	TWA	220 mg/m3 50 ppm
m-Xylene (CAS 108-38-3)	STEL	440 mg/m3 110 ppm
	TWA	220 mg/m3 50 ppm
o-Xylene (CAS 95-47-6)	STEL	440 mg/m3 110 ppm
	TWA	220 mg/m3 50 ppm
p-Xylene (CAS 106-42-3)	STEL	440 mg/m3 110 ppm
	TWA	220 mg/m3 50 ppm
Toluene (CAS 108-88-3)	STEL	380 mg/m3 100 ppm
	TWA	81 mg/m3 25 ppm

France. OELs. Occupational Exposure Limits as Prescribed by Art. R.4412-149 of Labor Code, as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	VLE	375 mg/m3 100 ppm
	VME	188 mg/m3 50 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	VLE	208 mg/m3 50 ppm
	VME	83 mg/m3 20 ppm
Ethylbenzene (CAS 100-41-4)	VLE	442 mg/m3 100 ppm
	VME	88,4 mg/m3 20 ppm
m-Xylene (CAS 108-38-3)	VLE	442 mg/m3 100 ppm

France. OELs. Occupational Exposure Limits as Prescribed by Art. R.4412-149 of Labor Code, as amended

Components	Type	Value
	VME	221 mg/m3 50 ppm
o-Xylene (CAS 95-47-6)	VLE	442 mg/m3 100 ppm
	VME	221 mg/m3 50 ppm
p-Xylene (CAS 106-42-3)	VLE	442 mg/m3 100 ppm
	VME	221 mg/m3 50 ppm
Toluene (CAS 108-88-3)	VLE	384 mg/m3 100 ppm
	VME	76,8 mg/m3 20 ppm

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

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	VLE	375 mg/m3
Regulatory status: Regulatory binding (VRC)		100 ppm
Regulatory status: Regulatory binding (VRC)	VME	188 mg/m3
Regulatory status: Regulatory binding (VRC)		50 ppm
Regulatory status: Regulatory binding (VRC)	VLE	208 mg/m3
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)		50 ppm
Regulatory status: Regulatory binding (VRC)	VME	83 mg/m3
Regulatory status: Regulatory binding (VRC)		20 ppm
Regulatory status: Regulatory binding (VRC)	VLE	442 mg/m3
Ethylbenzene (CAS 100-41-4)		100 ppm
Regulatory status: Regulatory binding (VRC)	VME	88,4 mg/m3
Regulatory status: Regulatory binding (VRC)		20 ppm
Regulatory status: Regulatory binding (VRC)	VLE	442 mg/m3
m-Xylene (CAS 108-38-3)		100 ppm
Regulatory status: Regulatory binding (VRC)	VME	221 mg/m3
Regulatory status: Regulatory binding (VRC)		50 ppm
Regulatory status: Regulatory binding (VRC)		

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

Components	Type	Value
o-Xylene (CAS 95-47-6)	VLE	442 mg/m3
Regulatory status:	Regulatory binding (VRC)	100 ppm
Regulatory status:	Regulatory binding (VRC)	221 mg/m3
	VME	50 ppm
Regulatory status:	Regulatory binding (VRC)	
Regulatory status:	Regulatory binding (VRC)	
p-Xylene (CAS 106-42-3)	VLE	442 mg/m3
Regulatory status:	Regulatory binding (VRC)	100 ppm
Regulatory status:	Regulatory binding (VRC)	221 mg/m3
	VME	50 ppm
Regulatory status:	Regulatory binding (VRC)	
Regulatory status:	Regulatory binding (VRC)	
Toluene (CAS 108-88-3)	VLE	384 mg/m3
Regulatory status:	Regulatory binding (VRC)	100 ppm
Regulatory status:	Regulatory binding (VRC)	76,8 mg/m3
	VME	20 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-Methoxy-2-propanol (CAS 107-98-2)	TWA	370 mg/m3
		100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	TWA	83 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	TWA	88 mg/m3
		20 ppm
m-Xylene (CAS 108-38-3)	TWA	220 mg/m3
		50 ppm
o-Xylene (CAS 95-47-6)	TWA	220 mg/m3
		50 ppm
p-Xylene (CAS 106-42-3)	TWA	220 mg/m3
		50 ppm
Toluene (CAS 108-88-3)	TWA	190 mg/m3
		50 ppm

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

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	AGW	370 mg/m3
		100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	AGW	83 mg/m3

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

Components	Type	Value
Ethylbenzene (CAS 100-41-4)	AGW	20 ppm
		88 mg/m ³
m-Xylene (CAS 108-38-3)	AGW	20 ppm
		220 mg/m ³
o-Xylene (CAS 95-47-6)	AGW	50 ppm
		220 mg/m ³
p-Xylene (CAS 106-42-3)	AGW	50 ppm
		220 mg/m ³
Toluene (CAS 108-88-3)	AGW	50 ppm
		190 mg/m ³
		50 ppm

Greece. OELs, Presidential Decree No. 307/1986, as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	1080 mg/m ³
	TWA	300 ppm 360 mg/m ³ 100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	410 mg/m ³
	TWA	100 ppm 410 mg/m ³ 100 ppm
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m ³
	TWA	125 ppm 435 mg/m ³ 100 ppm
m-Xylene (CAS 108-38-3)	STEL	650 mg/m ³
	TWA	150 ppm 435 mg/m ³ 100 ppm
o-Xylene (CAS 95-47-6)	STEL	650 mg/m ³
	TWA	150 ppm 435 mg/m ³ 100 ppm
p-Xylene (CAS 106-42-3)	STEL	650 mg/m ³
	TWA	150 ppm 435 mg/m ³ 100 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m ³
	TWA	100 ppm 192 mg/m ³ 50 ppm

Hungary. OELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 1&2, as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m ³
	TWA	375 mg/m ³

Hungary. OELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 1&2, as amended

Components	Type	Value
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m3
	TWA	83 mg/m3
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
	TWA	442 mg/m3
m-Xylene (CAS 108-38-3)	STEL	442 mg/m3
	TWA	221 mg/m3
o-Xylene (CAS 95-47-6)	STEL	442 mg/m3
	TWA	221 mg/m3
p-Xylene (CAS 106-42-3)	STEL	442 mg/m3
	TWA	221 mg/m3
Toluene (CAS 108-88-3)	STEL	380 mg/m3
	TWA	190 mg/m3

Iceland. OELs. Regulation 390/2009 on Pollution Limits and Measures to Reduce Pollution at the Workplace, as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m3
		150 ppm
	TWA	185 mg/m3 50 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m3
	TWA	50 ppm 83 mg/m3
Ethylbenzene (CAS 100-41-4)	STEL	20 ppm 884 mg/m3
	TWA	200 ppm 200 mg/m3
m-Xylene (CAS 108-38-3)	STEL	50 ppm 442 mg/m3
	TWA	100 ppm 109 mg/m3
		25 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m3 100 ppm
	TWA	109 mg/m3 25 ppm
p-Xylene (CAS 106-42-3)	STEL	442 mg/m3 100 ppm
	TWA	109 mg/m3 25 ppm
Toluene (CAS 108-88-3)	STEL	88 mg/m3 50 ppm
	TWA	94 mg/m3 25 ppm

Ireland. OELVs, Schedules 1 & 2, Code of Practise for Chemical Agents and Carcinogens Regulations

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m3
		150 ppm
	TWA	375 mg/m3
		100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm
p-Xylene (CAS 106-42-3)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	192 mg/m3
		50 ppm

Italy. OELs Components

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m3
		150 ppm
	TWA	375 mg/m3
		100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m3
		100 ppm

**Italy. OELs
Components**

Components	Type	Value
	TWA	221 mg/m3 50 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm
p-Xylene (CAS 106-42-3)	STEL	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm
Toluene (CAS 108-88-3)	TWA	192 mg/m3 50 ppm

Latvia. OELs. Occupational Exposure Limits of Chemical Substances at Workplace (Reg. No. 325/ 2007, L.V. 80, Annex 1), as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m3 150 ppm
	TWA	375 mg/m3 100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m3 50 ppm
	TWA	83 mg/m3 20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3 200 ppm
	TWA	442 mg/m3 100 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm
p-Xylene (CAS 106-42-3)	STEL	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm
Toluene (CAS 108-88-3)	STEL	150 mg/m3 40 ppm
	TWA	50 mg/m3 14 ppm

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

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	300 mg/m3

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

Components	Type	Value
		75 ppm
	TWA	190 mg/m3
		50 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm
p-Xylene (CAS 106-42-3)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	192 mg/m3
		50 ppm

Luxembourg. OELs. Binding Occupational Exposure Limit Values (Annex I), G.D.R. of 14 November 2016, OJ Memorial A, n ° 235/2016, as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m3
		150 ppm
	TWA	375 mg/m3
		100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3

Luxembourg. OELs. Binding Occupational Exposure Limit Values (Annex I), G.D.R. of 14 November 2016, OJ Memorial A, n ° 235/2016, as amended

Components	Type	Value
o-Xylene (CAS 95-47-6)	STEL	50 ppm 442 mg/m ³
	TWA	100 ppm 221 mg/m ³
p-Xylene (CAS 106-42-3)	STEL	50 ppm 442 mg/m ³
	TWA	100 ppm 221 mg/m ³
Toluene (CAS 108-88-3)	STEL	50 ppm 384 mg/m ³
	TWA	100 ppm 192 mg/m ³ 50 ppm

Malta. OELs. Protection of Health and Safety of Workers from Risks related to Chemical Agents at Work (L.N 227/2003 Schedules I and V), as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m ³
	TWA	150 ppm 375 mg/m ³
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	100 ppm 208 mg/m ³
	TWA	50 ppm 83 mg/m ³ 20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m ³
	TWA	200 ppm 442 mg/m ³ 100 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m ³ 100 ppm
	TWA	221 mg/m ³ 50 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m ³ 100 ppm
	TWA	221 mg/m ³ 50 ppm
p-Xylene (CAS 106-42-3)	STEL	442 mg/m ³ 100 ppm
	TWA	221 mg/m ³ 50 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m ³ 100 ppm
	TWA	192 mg/m ³ 50 ppm

Netherlands. OELs per Annex XIII of Working Conditions Regulation (Government Gazette no. 252, 29 December 2006), as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	563 mg/m ³
	TWA	375 mg/m ³
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m ³
	TWA	104 mg/m ³
Ethylbenzene (CAS 100-41-4)	STEL	430 mg/m ³
	TWA	215 mg/m ³
m-Xylene (CAS 108-38-3)	STEL	442 mg/m ³
	TWA	210 mg/m ³
o-Xylene (CAS 95-47-6)	STEL	442 mg/m ³
	TWA	210 mg/m ³
p-Xylene (CAS 106-42-3)	STEL	442 mg/m ³
	TWA	210 mg/m ³
Toluene (CAS 108-88-3)	STEL	384 mg/m ³
	TWA	150 mg/m ³

Norway. Regulation No. 1358 on Measures and Limit Values for Physical and Chemical Factors in Work Environment and Infection Groups for Biological Factors, as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	TLV	180 mg/m ³
		50 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m ³
		50 ppm
Ethylbenzene (CAS 100-41-4)	TLV	83 mg/m ³
		20 ppm
m-Xylene (CAS 108-38-3)	TLV	20 mg/m ³
		5 ppm
o-Xylene (CAS 95-47-6)	TLV	108 mg/m ³
		25 ppm
p-Xylene (CAS 106-42-3)	TLV	108 mg/m ³
		25 ppm
Toluene (CAS 108-88-3)	TLV	94 mg/m ³
		25 ppm

Poland. Maximum permissible concentrations and intensities of harmful factors in the work environment (Dz.U.Poz. 1286/2018, Annex 1)

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	360 mg/m ³
	TWA	180 mg/m ³
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	200 mg/m ³
	TWA	83 mg/m ³
Ethylbenzene (CAS 100-41-4)	STEL	400 mg/m ³

Poland. Maximum permissible concentrations and intensities of harmful factors in the work environment (Dz.U.Poz. 1286/2018, Annex 1)

Components	Type	Value
	TWA	200 mg/m ³
m-Xylene (CAS 108-38-3)	STEL	200 mg/m ³
	TWA	100 mg/m ³
o-Xylene (CAS 95-47-6)	STEL	200 mg/m ³
	TWA	100 mg/m ³
p-Xylene (CAS 106-42-3)	STEL	200 mg/m ³
	TWA	100 mg/m ³
Toluene (CAS 108-88-3)	STEL	200 mg/m ³
	TWA	100 mg/m ³

Portugal. Decree-Law No. 24/2012, Occupational Exposure Limit Values, Annex II, as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m ³
		150 ppm
	TWA	375 mg/m ³
		100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m ³
		50 ppm
	TWA	83 mg/m ³
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m ³
		200 ppm
	TWA	442 mg/m ³
		100 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
p-Xylene (CAS 106-42-3)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m ³
		100 ppm
	TWA	192 mg/m ³
		50 ppm

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796-2014)

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	100 ppm
	TWA	50 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	75 ppm

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796-2014)

Components	Type	Value
	TWA	20 ppm
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm
m-Xylene (CAS 108-38-3)	STEL	150 ppm
	TWA	100 ppm
o-Xylene (CAS 95-47-6)	STEL	150 ppm
	TWA	100 ppm
p-Xylene (CAS 106-42-3)	STEL	150 ppm
	TWA	100 ppm
Toluene (CAS 108-88-3)	TWA	20 ppm

Romania. OELs. Limit Values of Chemical Agents at Workplace (Regulation 1.218/2006, M.O 845, Annex 1, 3&4, as amended)

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m ³
		150 ppm
	TWA	375 mg/m ³
		100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m ³
		50 ppm
	TWA	83 mg/m ³
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m ³
		200 ppm
	TWA	442 mg/m ³
		100 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
p-Xylene (CAS 106-42-3)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³
		50 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m ³
		100 ppm
	TWA	192 mg/m ³
		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-Methoxy-2-propanol (CAS 107-98-2)	TWA	375 mg/m ³
		100 ppm

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

Components	Type	Value
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	TWA	83 mg/m ³ 20 ppm
Ethylbenzene (CAS 100-41-4)	TWA	442 mg/m ³ 100 ppm
m-Xylene (CAS 108-38-3)	TWA	221 mg/m ³ 50 ppm
o-Xylene (CAS 95-47-6)	TWA	221 mg/m ³ 50 ppm
p-Xylene (CAS 106-42-3)	TWA	221 mg/m ³ 50 ppm
Toluene (CAS 108-88-3)	TWA	192 mg/m ³ 50 ppm

Slovakia. OELs. Maximum permissible exposure limits for chemical factors in workplace air (Regulation No 355/2006, Annex 1, Table 1, as amended)

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m ³ 150 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	166 mg/m ³ 40 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m ³ 200 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m ³ 100 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m ³ 100 ppm
p-Xylene (CAS 106-42-3)	STEL	442 mg/m ³ 100 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m ³ 100 ppm

Slovenia. OELs. Occupational Exposure Limits of Chemicals at Workplace (Reg. on Protection of Workers from Risks due to Exp. to Chemicals at Work, Ann. I 100/2001), as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	KTV	568 mg/m ³ 150 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	KTV	208 mg/m ³ 50 ppm
Ethylbenzene (CAS 100-41-4)	KTV	884 mg/m ³ 200 ppm
m-Xylene (CAS 108-38-3)	KTV	442 mg/m ³ 100 ppm
o-Xylene (CAS 95-47-6)	KTV	442 mg/m ³ 100 ppm

Slovenia. OELs. Occupational Exposure Limits of Chemicals at Workplace (Reg. on Protection of Workers from Risks due to Exp. to Chemicals at Work, Ann. I 100/2001), as amended

Components	Type	Value
p-Xylene (CAS 106-42-3)	KTV	442 mg/m ³
		100 ppm
Toluene (CAS 108-88-3)	KTV	384 mg/m ³
		100 ppm

Slovenia. OELs. Occupational Exposure Limits of Chemicals at Workplace (Reg. on Protection of Workers from Risks due to Exp. to Chemicals at Work, Annex I), as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	TWA	375 mg/m ³
		100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	TWA	83 mg/m ³
		20 ppm
Ethylbenzene (CAS 100-41-4)	TWA	442 mg/m ³
		100 ppm
m-Xylene (CAS 108-38-3)	TWA	221 mg/m ³
		50 ppm
o-Xylene (CAS 95-47-6)	TWA	221 mg/m ³
		50 ppm
p-Xylene (CAS 106-42-3)	TWA	221 mg/m ³
		50 ppm
Toluene (CAS 108-88-3)	TWA	192 mg/m ³
		50 ppm

Spain. OELs. INSST, Límites de Exposición Profesional Para Agentes Químicos, Table 1-Valores Límites Ambientales (VLAs)

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m ³
		150 ppm
	TWA	375 mg/m ³ 100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	208 mg/m ³
		50 ppm
	TWA	83 mg/m ³ 20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m ³
		200 ppm
	TWA	441 mg/m ³ 100 ppm
m-Xylene (CAS 108-38-3)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³ 50 ppm
o-Xylene (CAS 95-47-6)	STEL	442 mg/m ³
		100 ppm
	TWA	221 mg/m ³ 50 ppm

Spain. OELs. INSST, Límites de Exposición Profesional Para Agentes Químicos, Table 1-Valores Límites Ambientales (VLAs)

Components	Type	Value
p-Xylene (CAS 106-42-3)	STEL	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3 100 ppm
	TWA	192 mg/m3 50 ppm

Sweden. OELs (Annex 1). Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2018:1), as amended

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	Ceiling	568 mg/m3
	STEL	150 ppm 300 mg/m3
	TWA	75 ppm 190 mg/m3
		50 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Ceiling	200 mg/m3
	TWA	50 ppm 83 mg/m3
Ethylbenzene (CAS 100-41-4)	Ceiling	20 ppm 884 mg/m3
	TWA	220 mg/m3 50 ppm
m-Xylene (CAS 108-38-3)	Ceiling	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm
o-Xylene (CAS 95-47-6)	Ceiling	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm
p-Xylene (CAS 106-42-3)	Ceiling	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm
Toluene (CAS 108-88-3)	Ceiling	384 mg/m3 100 ppm
	TWA	192 mg/m3 50 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle MAK-Werte

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	720 mg/m3
		200 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle MAK-Werte

Components	Type	Value
	TWA	360 mg/m3
		100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	164 mg/m3
		40 ppm
	TWA	82 mg/m3
		20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	220 mg/m3
		50 ppm
	TWA	220 mg/m3
		50 ppm
m-Xylene (CAS 108-38-3)	STEL	440 mg/m3
		100 ppm
	TWA	220 mg/m3
		50 ppm
o-Xylene (CAS 95-47-6)	STEL	440 mg/m3
		100 ppm
	TWA	220 mg/m3
		50 ppm
p-Xylene (CAS 106-42-3)	STEL	440 mg/m3
		100 ppm
	TWA	220 mg/m3
		50 ppm
Toluene (CAS 108-88-3)	STEL	760 mg/m3
		200 ppm
	TWA	190 mg/m3
		50 ppm

UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1

Components	Type	Value
1-Methoxy-2-propanol (CAS 107-98-2)	STEL	560 mg/m3
		150 ppm
	TWA	375 mg/m3
		100 ppm
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	416 mg/m3
		100 ppm
	TWA	208 mg/m3
		50 ppm
Ethylbenzene (CAS 100-41-4)	STEL	552 mg/m3
		125 ppm
	TWA	441 mg/m3
		100 ppm
m-Xylene (CAS 108-38-3)	STEL	441 mg/m3
		100 ppm
	TWA	220 mg/m3
		50 ppm
o-Xylene (CAS 95-47-6)	STEL	441 mg/m3

UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1

Components	Type	Value
		100 ppm
	TWA	220 mg/m3
p-Xylene (CAS 106-42-3)	STEL	50 ppm 441 mg/m3
	TWA	100 ppm 220 mg/m3
Toluene (CAS 108-88-3)	STEL	50 ppm 384 mg/m3
	TWA	100 ppm 191 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-Methoxy-2-propanol (CAS 107-98-2)	STEL	568 mg/m3
	TWA	150 ppm 375 mg/m3
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	STEL	100 ppm 208 mg/m3
	TWA	50 ppm 83 mg/m3 20 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
	TWA	200 ppm 442 mg/m3
m-Xylene (CAS 108-38-3)	STEL	100 ppm 442 mg/m3
	TWA	100 ppm 221 mg/m3
o-Xylene (CAS 95-47-6)	STEL	50 ppm 442 mg/m3
	TWA	100 ppm 221 mg/m3
p-Xylene (CAS 106-42-3)	STEL	50 ppm 442 mg/m3
	TWA	100 ppm 221 mg/m3
Toluene (CAS 108-88-3)	STEL	50 ppm 384 mg/m3
	TWA	100 ppm 192 mg/m3 50 ppm

Biological limit values
Croatia. BELs (BGV). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and BELs, Annex IV (NN 91/2018), as amended

Components	Value	Determinant	Specimen	Sampling Time
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	3,5 mg/l	4-methylpentan-2-one	Urine	*
	35 nmol/l	4-methylpentan-2-one	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	*
m-Xylene (CAS 108-38-3)	14,1 umol/l	ethylbenzene	Blood	*
	1,5 g/g	Methylhippuric acids	Creatinine in urine	*
	1,5 mg/l	xylene	Blood	*
	0,88 mol/mol	Methylhippuric acids	Creatinine in urine	*
o-Xylene (CAS 95-47-6)	14,13 umol/l	xylene	Blood	*
	1,5 g/g	Methylhippuric acids	Creatinine in urine	*
	1,5 mg/l	xylene	Blood	*
	0,88 mol/mol	Methylhippuric acids	Creatinine in urine	*
p-Xylene (CAS 106-42-3)	14,13 umol/l	xylene	Blood	*
	1,5 g/g	Methylhippuric acids	Creatinine in urine	*
	1,5 mg/l	xylene	Blood	*
	0,88 mol/mol	Methylhippuric acids	Creatinine in urine	*
Toluene (CAS 108-88-3)	14,13 umol/l	xylene	Blood	*
	2,5 g/g	Hippuric acid	Creatinine in urine	*
	1 mg/g	o-cresol (Phenol, 2-methyl-)	Creatinine in urine	*
	1 mg/l	Toluene	Blood	*
	1,05 mmol/mol	o-cresol (Phenol, 2-methyl-)	Creatinine in urine	*
	1,58 mol/mol	Hippuric acid	Creatinine in urine	*
	20 ppm	Toluene	End-exhaled air	*
	10,85 umol/l	Toluene	Blood	*
0,83 umol/l	Toluene	End-exhaled air	*	

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

Czech Republic. BELs. Government Decree 432/2003 Sb., as amended

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	*
m-Xylene (CAS 108-38-3)	820 µmol/mmol	Methylhippuric acids	Creatinine in urine	*
	1400 mg/g	Methylhippuric acids	Creatinine in urine	*

Czech Republic. BELs. Government Decree 432/2003 Sb., as amended

Components	Value	Determinant	Specimen	Sampling Time
o-Xylene (CAS 95-47-6)	820 µmol/mmol	Methylhippuric acids	Creatinine in urine	*
	1400 mg/g	Methylhippuric acids	Creatinine in urine	*
p-Xylene (CAS 106-42-3)	820 µmol/mmol	Methylhippuric acids	Creatinine in urine	*
	1400 mg/g	Methylhippuric acids	Creatinine in urine	*
Toluene (CAS 108-88-3)	1,6 µmol/mmol	o-Cresol (with hydrolysis)	Creatinine in urine	*
	1,5 mg/g	o-Cresol (with hydrolysis)	Creatinine in urine	*

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

Finland. HTP-arvot, App 2., Biological Limit Values, Social Affairs and Ministry of Health

Components	Value	Determinant	Specimen	Sampling Time
Ethylbenzene (CAS 100-41-4)	5,2 mmol/l	Mandelic acid	Urine	*
m-Xylene (CAS 108-38-3)	5 mmol/l	Methylhippuric acids	Urine	*
o-Xylene (CAS 95-47-6)	5 mmol/l	Methylhippuric acids	Urine	*
p-Xylene (CAS 106-42-3)	5 mmol/l	Methylhippuric acids	Urine	*
Toluene (CAS 108-88-3)	500 nmol/l	Toluene concentration	Blood	*

* - 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
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	2 mg/l	Méthylisobutylic étone	Urine	*
Ethylbenzene (CAS 100-41-4)	1500 mg/g	Acide mandélique	Creatinine in urine	*
m-Xylene (CAS 108-38-3)	1500 mg/g	Acides méthylhippuriques	Creatinine in urine	*
o-Xylene (CAS 95-47-6)	1500 mg/g	Acides méthylhippuriques	Creatinine in urine	*
p-Xylene (CAS 106-42-3)	1500 mg/g	Acides méthylhippuriques	Creatinine in urine	*
Toluene (CAS 108-88-3)	2500 mg/g	Acide hippurique	Creatinine in urine	*
	2500 mg/g	Acide hippurique	Creatinine in urine	*
	1 mg/l	Toluène	Venous blood	*

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

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

Components	Value	Determinant	Specimen	Sampling Time
1-Methoxy-2-propanol (CAS 107-98-2)	15 mg/l	1-Methoxypropan-2-ol	Urine	*
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	0,7 mg/l	4-Methylpentan-2-on	Urine	*
Ethylbenzene (CAS 100-41-4)	250 mg/g	Mandelsäure plus Phenylglyoxylsäure	Creatinine in urine	*

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

Components	Value	Determinant	Specimen	Sampling Time
m-Xylene (CAS 108-38-3)	2000 mg/l	Methylhippur-(Tolur-) säure (alle Isomere)	Urine	*
o-Xylene (CAS 95-47-6)	2000 mg/l	Methylhippur-(Tolur-) säure (alle Isomere)	Urine	*
p-Xylene (CAS 106-42-3)	2000 mg/l	Methylhippur-(Tolur-) säure (alle Isomere)	Urine	*
Toluene (CAS 108-88-3)	75 µg/l	Toluol	Urine	*
	600 µg/l	Toluol	Blood	*
	1,5 mg/l	o-Kresol (nach Hydrolyse)	Urine	*

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

Hungary. BELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 3&4, as amended

Components	Value	Determinant	Specimen	Sampling Time
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	35 µmol/l	methyl isobutyl ketone	Urine	*
	3,5 mg/l	methyl isobutyl ketone	Urine	*
Ethylbenzene (CAS 100-41-4)	1110 µmol/mmol	mandelic acid	Creatinine in urine	*
	1500 mg/g	mandelic acid	Creatinine in urine	*
m-Xylene (CAS 108-38-3)	860 µmol/mmol	methyl hippuric acids	Creatinine in urine	*
	1500 mg/g	methyl hippuric acids	Creatinine in urine	*
o-Xylene (CAS 95-47-6)	860 µmol/mmol	methyl hippuric acids	Creatinine in urine	*
	1500 mg/g	methyl hippuric acids	Creatinine in urine	*
p-Xylene (CAS 106-42-3)	860 µmol/mmol	methyl hippuric acids	Creatinine in urine	*
	1500 mg/g	methyl hippuric acids	Creatinine in urine	*
Toluene (CAS 108-88-3)	1 µmol/mmol	o-crezol	Creatinine in urine	*
	1 mg/g	o-crezol	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
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	2,36 mg/g	Methyl isobutyl ketone	Creatinine in urine	*
	3,5 mg/l	Methyl isobutyl ketone	Urine	*
Ethylbenzene (CAS 100-41-4)	8,03 mg/g	2 and 4-ethylphenol	Creatinine in urine	*
	12 mg/l	2 and 4-ethylphenol	Urine	*
m-Xylene (CAS 108-38-3)	1334 mg/g	Methylhippuric acids	Creatinine in urine	*
	2000 mg/l	Methylhippuric acids	Urine	*
	1,5 mg/l	xylene	Blood	*

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
o-Xylene (CAS 95-47-6)	1334 mg/g	Methylhippuric acids	Creatinine in urine	*
	2000 mg/l	Methylhippuric acids	Urine	*
	1,5 mg/l	xylene	Blood	*
p-Xylene (CAS 106-42-3)	1334 mg/g	Methylhippuric acids	Creatinine in urine	*
	2000 mg/l	Methylhippuric acids	Urine	*
	1,5 mg/l	xylene	Blood	*
Toluene (CAS 108-88-3)	600 µg/l	Toluene	Blood	*
	1600 mg/g	Hippuric acid	Creatinine in urine	*
	1,03 mg/g	o-cresol (Phenol, 2-methyl-)	Creatinine in urine	*
	2401 mg/l	Hippuric acid	Urine	*
	1,5 mg/l	o-cresol (Phenol, 2-methyl-)	Urine	*

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

Spain. BELs. INSST, Límites de Exposición Profesional Para Agentes Químicos, Table 3-Valores Límite Biológicos (VLB)

Components	Value	Determinant	Specimen	Sampling Time
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	1 mg/l	Metilisobutilcetona	Urine	*
Ethylbenzene (CAS 100-41-4)	700 mg/g	Suma del ácido mandélico y el ácido fenilgloxílico	Creatinine in urine	*
m-Xylene (CAS 108-38-3)	1 g/g	Ácidos metilhipúricos	Creatinine in urine	*
o-Xylene (CAS 95-47-6)	1 g/g	Ácidos metilhipúricos	Creatinine in urine	*
p-Xylene (CAS 106-42-3)	1 g/g	Ácidos metilhipúricos	Creatinine in urine	*
Toluene (CAS 108-88-3)	0,6 mg/g	o-cresol (Phenol, 2-methyl-)	Urine	*
	0,08 mg/l	Tolueno	Urine	*
	0,05 mg/l	Tolueno	Blood	*

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

Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle BAT-Werte

Components	Value	Determinant	Specimen	Sampling Time
1-Methoxy-2-propanol (CAS 107-98-2)	20 mg/l	1-METHOXYPROPANOL-2	Urine	*
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	0,7 mg/l	4-Methylpentan-2-on	Urine	*
Ethylbenzene (CAS 100-41-4)	600 mg/g	Mandelsäure + Phenylglyoxylsäure	Creatinine in urine	*
m-Xylene (CAS 108-38-3)	2 g/l	Methylhippursäuren	Urine	*
o-Xylene (CAS 95-47-6)	2 g/l	Methylhippursäuren	Urine	*
p-Xylene (CAS 106-42-3)	2 g/l	Methylhippursäuren	Urine	*
Toluene (CAS 108-88-3)	75 µg/l	Toluol	Urine	*

Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle BAT-Werte

Components	Value	Determinant	Specimen	Sampling Time
	600 µg/l	Toluol	Blood	*
	2 g/g	Hippursäure	Creatinine in urine	*
	0,5 mg/l	o-Kresol	Urine	*

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

UK. BELs. Biological Monitoring Guidance Values (BMGVs) (EH40/2005 (Fourth Edition 2020)), Table 2

Components	Value	Determinant	Specimen	Sampling Time
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	20 umol/l	4-Methylpentan-2-one	Urine	*
m-Xylene (CAS 108-38-3)	650 mmol/mol	Methyl hippuric acid	Creatinine in urine	*
o-Xylene (CAS 95-47-6)	650 mmol/mol	Methyl hippuric acid	Creatinine in urine	*
p-Xylene (CAS 106-42-3)	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
Austria. MAK List

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Belgium OELs: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Bulgaria OELs: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Croatia ELVs: Skin designation

Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Czech Republic PELs: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Denmark GV: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Estonia OELs: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

EU Exposure Limit Values: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Finland Exposure Limit Values: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

France INRS: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

France Mandatory OELs (VLEP): Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Germany DFG MAK (advisory): Skin designation

4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Germany TRGS 900 Limit Values: Skin designation

4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Greece OEL: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Hungary OELs: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Iceland OELs: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Ireland Exposure Limit Values: Skin designation

4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Italy OELs: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Danger of cutaneous absorption
Ethylbenzene (CAS 100-41-4)	Danger of cutaneous absorption
m-Xylene (CAS 108-38-3)	Danger of cutaneous absorption
o-Xylene (CAS 95-47-6)	Danger of cutaneous absorption
p-Xylene (CAS 106-42-3)	Danger of cutaneous absorption
Toluene (CAS 108-88-3)	Danger of cutaneous absorption

Latvia OELs: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Lithuania OELs: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Luxembourg OELs: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Malta OELs: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Netherlands OELs (binding): Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.

Norway Exposure Limit Values: Skin designation

1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
-------------------------------------	-----------------------------------

4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.
Portugal OELs: Skin designation	
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.
Romania OELs: Skin designation	
1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.
Slovakia OELs: Skin designation	
1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	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)	
1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.
Spain OELs: Skin designation	
1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.
Sweden Threshold Limit Values: Skin designation	
1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.
Switzerland SUVA Limit Values at the Workplace: Skin designation	
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.
p-Xylene (CAS 106-42-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.
UK EH40 WEL: Skin designation	
1-Methoxy-2-propanol (CAS 107-98-2)	Can be absorbed through the skin.
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Can be absorbed through the skin.
Ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
m-Xylene (CAS 108-38-3)	Can be absorbed through the skin.
o-Xylene (CAS 95-47-6)	Can be absorbed through the skin.

p-Xylene (CAS 106-42-3)
Toluene (CAS 108-88-3)

Can be absorbed through the skin.
Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls Explosion-proof general and local exhaust ventilation. 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. 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) and a face shield. Wear a full-face respirator, if needed. Eye protection should meet standard EN 166.

Skin protection

- Hand protection Wear suitable gloves tested to EN374. Glove material: Viton® over Butyl rubber. Use gloves with breakthrough time of 240 +/- 30 minutes. Minimum glove thickness 0.71 (28 mil) mm. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

- 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. Wear respiratory protection with combination filter (dust and gas filter) during spraying operations. Use filter type (ABEK2/P3) according to EN 143. 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 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

Physical state	Liquid.
Form	Liquid.
Colour	Clear.
Odour	Characteristic of solvents.
Odour threshold	Property has not been measured.
Melting point/freezing point	-48 °C (-54,4 °F) (Xylene)
Boiling point or initial boiling point and boiling range	114 - 137 °C (237,2 - 278,6 °F)
Flammability	Flammable liquid and vapour.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	1 % (Xylene)
Explosive limit – upper (%)	8 % (MIBK)
Flash point	14 °C (57,2 °F) (MIBK)
Auto-ignition temperature	287 °C (548,6 °F) (1-Methoxy-2-propanol)
Decomposition temperature	220 °C (428 °F) (MIBK)
pH	4 - 7
Kinematic viscosity	1,1 mm ² /s (25 °C (77 °F))
Solubility	
Solubility (water)	(1,0 - < 10%) Moderately soluble in water.
Partition coefficient (n-octanol/water) (log value)	Not applicable, product is a mixture.
Vapour pressure	11 mmHg (25 °C (77 °F))

Density and/or relative density

Density 0,86 g/cm³ (25 °C (77 °F))
Relative density 0,86 (Water=1) (25 °C (77 °F))

Vapour density > 1 (Air=1) (25 °C (77 °F))

Particle characteristics

Particle size Does not contain nanomaterials.

9.2. Other information

9.2.1. Information with regard to physical hazard classes No relevant additional information available.

9.2.2. Other safety characteristics

Evaporation rate Property has not been measured.
Flammability Flammable liquid and vapour.
Viscosity Property has not been measured.
VOC 860 g/l
 100 %
 7,18 lb/gal

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. Strong reducing agents.

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 or dizziness. May cause irritation to the respiratory system. May be harmful if inhaled.

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 or dizziness. Narcosis. Headache. Nausea, vomiting. Abdominal pain. Diarrhoea. Behavioural changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. Jaundice. Prolonged exposure may cause chronic effects.

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

Acute toxicity May be harmful if inhaled.

Components	Species	Test Results
1-Methoxy-2-propanol (CAS 107-98-2)		
Acute		
Dermal		
LD50	Rabbit	13000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)		
Acute		
Dermal		
LD50	Rabbit	> 16000 mg/kg

Components	Species	Test Results
Inhalation		
<i>Vapour</i>		
LC50	Rat	11 mg/l, 4 Hours
Oral		
LD50	Rat	3200 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
m-Xylene (CAS 108-38-3)		
<u>Acute</u>		
Oral		
LD50	Rat	5011 mg/kg
o-Xylene (CAS 95-47-6)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 43 g/kg
Inhalation		
LC50	Rat	6350 ppm, 4 Hours
Oral		
LD50	Rat	3608 mg/kg
p-Xylene (CAS 106-42-3)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 43 g/kg
Inhalation		
LC50	Rat	6580 ppm, 4 Hours
<i>Vapour</i>		
LC50	Rat	20 mg/l, 4 Hours
Oral		
LD50	Rat	4029 mg/kg
Toluene (CAS 108-88-3)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	12200 mg/kg
Inhalation		
<i>Vapour</i>		
LC50	Rat	28,1 mg/l, 4 Hours
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory sensitisation	Based on available data, the classification criteria are not met.	
Skin sensitisation	Based on available data, the classification criteria are not met.	
Germ cell mutagenicity	Based on available data, the classification criteria are not met.	
Carcinogenicity	Suspected of causing cancer.	

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Toluene (CAS 108-88-3)

IARC Monographs. Overall Evaluation of Carcinogenicity

4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	2B Possibly carcinogenic to humans.
Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.
m-Xylene (CAS 108-38-3)	3 Not classifiable as to carcinogenicity to humans.
o-Xylene (CAS 95-47-6)	3 Not classifiable as to carcinogenicity to humans.
p-Xylene (CAS 106-42-3)	3 Not classifiable as to carcinogenicity to humans.
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	May cause respiratory irritation. May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure	May cause damage to organs (central nervous system, kidneys, liver) through prolonged or repeated exposure.
Aspiration hazard	May be fatal if swallowed and enters airways.
Mixture versus substance information	No information available.

11.2. Information on other hazards

Endocrine disrupting properties	This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.
Other information	Symptoms may be delayed.

SECTION 12: Ecological information

12.1. Toxicity Toxic to aquatic life.

Components		Species	Test Results
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	3682 mg/l, 24 hours
Fish	LC50	Pimephales promelas	505 mg/l, 96 Hours
<i>Chronic</i>			
Crustacea	EC50	Daphnia magna	78 mg/l, 21 days
Fish	NOEC	Pimephales promelas	57 mg/l, 31 days
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
m-Xylene (CAS 108-38-3)			
Aquatic			
<i>Acute</i>			
Fish	LC50	Oncorhynchus mykiss	8,4 mg/l, 96 Hours
o-Xylene (CAS 95-47-6)			
Aquatic			
Algae	EC50	Selenastrum capricornutum	4,7 mg/l, 72 Hours
Fish	LC50	Oncorhynchus mykiss	7,6 mg/l, 96 hours
p-Xylene (CAS 106-42-3)			
Aquatic			
Algae	EC50	Pseudokirchnerella subcapitata	3,2 mg/l, 72 Hours
Crustacea	EC50	Daphnia magna	8,5 mg/l, 48 Hours
Fish	LC50	Oncorhynchus mykiss	2,6 mg/l, 96 hours

Components	Species	Test Results
Toluene (CAS 108-88-3)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Daphnia magna 11,5 mg/l, 48 hours
Fish	LC50	Oncorhynchus kisutch 5,5 mg/l, 96 hours
<i>Chronic</i>		
Crustacea	NOEC	Ceriodaphnia dubia 0,74 mg/l, 7 days
Fish	NOEC	Oncorhynchus kisutch 1,4 mg/l, 40 days
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)	Not applicable, product is a mixture.	
1-Methoxy-2-propanol (CAS 107-98-2)		-0,49
4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)		1,31
Ethylbenzene (CAS 100-41-4)		3,15
Toluene (CAS 108-88-3)		2,73
m-Xylene (CAS 108-38-3)		3,2
o-Xylene (CAS 95-47-6)		3,12
p-Xylene (CAS 106-42-3)		3,15
Bioconcentration factor (BCF)	Not available.	
12.4. Mobility in soil	This product is moderately water soluble and may disperse in soil.	
12.5. Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.	
12.6. Endocrine disrupting properties	This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.	
12.7. Other adverse effects	The product contains volatile organic compounds which have a photochemical ozone creation potential.	
12.8. Additional information		
Estonia Dangerous substances in soil Data		
Ethylbenzene (CAS 100-41-4)		ETHYLBENZENE 0,1 mg/kg ETHYLBENZENE 5 mg/kg ETHYLBENZENE 50 mg/kg
m-Xylene (CAS 108-38-3)		Chemical pesticides (As the total sum of the active substances) 0,5 mg/kg Chemical pesticides (As the total sum of the active substances) 20 mg/kg Chemical pesticides (As the total sum of the active substances) 5 mg/kg
o-Xylene (CAS 95-47-6)		Chemical pesticides (As the total sum of the active substances) 0,5 mg/kg Chemical pesticides (As the total sum of the active substances) 20 mg/kg Chemical pesticides (As the total sum of the active substances) 5 mg/kg
p-Xylene (CAS 106-42-3)		Chemical pesticides (As the total sum of the active substances) 0,5 mg/kg Chemical pesticides (As the total sum of the active substances) 20 mg/kg Chemical pesticides (As the total sum of the active substances) 5 mg/kg
Toluene (CAS 108-88-3)		TOLUENE 0,1 mg/kg TOLUENE 100 mg/kg TOLUENE 3 mg/kg

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose 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. Do not re-use empty containers.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. 08 01 11*
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. 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	UN1263
14.2. UN proper shipping name	PAINT RELATED MATERIAL
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Hazard No. (ADR)	33
Tunnel restriction code	D/E
14.4. Packing group	II
14.5. Environmental hazards	No
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number	UN1263
14.2. UN proper shipping name	PAINT RELATED MATERIAL
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
14.4. Packing group	II
14.5. Environmental hazards	No
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number	UN1263
14.2. UN proper shipping name	PAINT RELATED MATERIAL
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
14.4. Packing group	II
14.5. Environmental hazards	No
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number	UN1263
14.2. UN proper shipping name	Paint related material
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
14.4. Packing group	II
14.5. Environmental hazards	No
ERG Code	3L
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

- 14.1. UN number** UN1263
14.2. UN proper shipping name PAINT RELATED MATERIAL
14.3. Transport hazard class(es)
Class 3
Subsidiary risk -
14.4. Packing group II
14.5. Environmental hazards
Marine pollutant No
EmS F-E, S-E
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
14.7. Maritime transport in bulk according to IMO instruments Not established.

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 (EU) 2019/1021 On persistent organic pollutants (recast), 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)
m-Xylene (CAS 108-38-3)
o-Xylene (CAS 95-47-6)
p-Xylene (CAS 106-42-3)
Toluene (CAS 108-88-3)
- 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 authorization, 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**
- Conditions of restriction given for the associated entry number should be considered
- | | |
|---|----|
| 1-Methoxy-2-propanol (CAS 107-98-2) | 3 |
| 4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1) | 40 |
| Toluene (CAS 108-88-3) | 48 |
- Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**
Toluene (CAS 108-88-3)
- Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex I, as amended**
Not listed.
- Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex II, as amended**
Not listed.

Other EU regulations

- Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
- ANNEX 1, PART 1 Categories of dangerous substances
Hazard categories in accordance with Regulation (EC) No 1272/2008
- P5a, b or c FLAMMABLE LIQUIDS

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	According to Directive 92/85/EEC as amended, pregnant women should not work with the product, if there is the least risk of exposure. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

France regulations

France INRS Table of Occupational Diseases

4-methylpentan-2-one; isobutyl methyl ketone (CAS 108-10-1)	Affections engendrées par les solvants organiques liquides à usage professionnel : hydrocarbures liquides aliphatiques ou cycliques saturés ou insaturés et leurs mélanges; hydrocarbures halogénés liquides; dérivés nitrés des hydrocarbures aliphatiques; al 84
m-Xylene (CAS 108-38-3)	Affections gastro-intestinales provoquées par le benzène, le toluène, les xylènes et tous les produits en renfermant 4 bis
o-Xylene (CAS 95-47-6)	Affections gastro-intestinales provoquées par le benzène, le toluène, les xylènes et tous les produits en renfermant 4 bis

15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
 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.
 EC50: Effective Concentration 50%.
 IATA: International Air Transport Association.
 IMDG Code: International Maritime Dangerous Goods Code.
 IMO: International Maritime Organization.
 KTV: Short term exposure limit
 LC50: Lethal Concentration 50%.
 LD50: Lethal Dose 50%.
 MAC: Maximum Allowed Concentration.
 NOEC: No observed effect concentration.
 PBT: Persistent, bioaccumulative, toxic.
 RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
 STEL: Short-Term Exposure Limit.
 TLV: Threshold Limit Value.
 TWA : Time Weighed Average Value.
 VLE: Exposure Limit Value.
 VME: Exposure Average Value.
 vPvB: very Persistent, very Bioaccumulative.

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

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 statements, which are 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.
 H351 Suspected of causing cancer.
 H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure by inhalation.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Training information

Follow training instructions when handling this material.

Disclaimer

Stainless Steel Coatings, Inc. 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.