SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture	SELF ETCHING WASH PRIMER
Registration number	-
Synonyms	None.
Product code	MP-600-QT
Issue date	28-April-2015
Version number	01

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

Identified uses	Automotive Acid Etch Primer
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name	Quest Automotive Products	
Address	600 Nova Drive SE Massillon, OH 44646 United States	
Division	Massillon	
Telephone	General Assistance	(330) 830-6000
e-mail	rpandrus@quest-ap.com	
Contact person	Not available.	
1.4. Emergency telephone number	CHEMTREC	(800) 424-9300

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 Directive 67/548/EEC or 1999/45/EC as amended

Classification F;R11, Muta. Cat. 3;R68, Repr. Cat. 3;R63, Xn;R20/21/22, Xi;R36, R52/53

The full text for all R-phrases is displayed in section 16.

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

Physical hazards		
Flammable liquids	Category 2	H225 - Highly flammable liquid and vapour.
Health hazards		
Acute toxicity, oral	Category 4	H302 - Harmful if swallowed.
Acute toxicity, dermal	Category 4	H312 - Harmful in contact with skin.
Acute toxicity, inhalation	Category 4	H332 - Harmful if inhaled.
Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Germ cell mutagenicity	Category 2	H341 - Suspected of causing genetic defects.
Carcinogenicity	Category 1A	H350 - May cause cancer.
Reproductive toxicity (the unborn child)	Category 2	H361d - Suspected of damaging the unborn child.
Environmental hazards		
Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.

Hazard summary

Physical hazards	Highly flammable.

Health hazards Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes. Possible risk of harm to the unborn child. Possible risk of irreversible effects. Occupational exposure to the substance or mixture may cause adverse health effects.

Environmental hazards Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Specific hazards Prolonged exposure may cause chronic effects.

Main symptoms Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Skin irritation. May cause redness and pain.

2.2. Label elements

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

Contains: 4-Methyl-2-pentanone, Ethyl benzene, Isobutyl alcohol, Methanol, Phenol, Toluene, Xylene, Zinc chromate

Hazard pictograms

Signal word Danger

Hazard statements

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H361d	Suspected of damaging the unborn child.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing vapours.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330	Rinse mouth.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use appropriate media to extinguish.
P391	Collect spillage.

Storage

P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information 23,36 % of the mixture consists of component(s) of unknown acute oral toxicity. 77,66 % of the mixture consists of component(s) of unknown acute dermal toxicity. 37,36 % of the mixture consists of component(s) of unknown acute inhalation toxicity. 31,23 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Ethanol	50 - < 60	64-17-5 200-578-6	-	603-002-00-5	
Classification: **DSD:** F;R11, Xi;R36 **CLP:** -					
1-Methoxy-2-propyl acetate	5 - < 10	108-65-6 203-603-9	-	607-195-00-7	#
Classification: **DSD:** R10 **CLP:** Flam. Liq. 3;H226					
Isobutyl alcohol	5 - < 10	78-83-1 201-148-0	-	603-108-00-1	
Classification: **DSD:** R10, Xi;R37/38-41, R67 **CLP:** -					
Toluene	5 - < 10	108-88-3 203-625-9	-	601-021-00-3	#
Classification: **DSD:** F;R11, Repr. Cat. 3;R63, Xn;R65-48/20, Xi;R38, R67 **CLP:** Flam. Liq. 2;H225, Asp. Tox. 1;H304, Skin Irrit. 2;H315, STOT SE 3;H336, Repr. 2;H361d, STOT RE 2;H373, Aquatic Chronic 2;H411					
Xylene	3 - < 5	1330-20-7 215-535-7	-	601-022-00-9	#
Classification: **DSD:** R10, Xn;R20/21, Xi;R38					C
CLP: Flam. Liq. 3;H226, Acute Tox. 4;H312, Skin Irrit. 2;H315, Acute Tox. 4;H332, Aquatic Chronic 2;H411					C
4-Methyl-2-pentanone	1 - < 3	108-10-1 203-550-1	-	606-004-00-4	#
Classification: **DSD:** F;R11, Xn;R20, Xi;R36/37, R66 **CLP:** -					
Ethyl benzene	1 - < 3	100-41-4 202-849-4	-	601-023-00-4	#
Classification: **DSD:** F;R11, Xn;R20 **CLP:** Flam. Liq. 2;H225, Asp. Tox. 1;H304, Acute Tox. 4;H332, Carc. 2;H351, STOT RE 2;H373, Aquatic Chronic 2;H411					
Methanol	1 - < 3	67-56-1 200-659-6	-	603-001-00-X	#
Classification: **DSD:** F;R11, T;R23/24/25-39/23/24/25 **CLP:** -					

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Zinc chromate	1 - < 3	13530-65-9 236-878-9	-	-	
Classification: **DSD:** N;R50/53 **CLP:** -					
Phenol	< 1	108-95-2 203-632-7	-	604-001-00-2	#
Classification: **DSD:** Muta. Cat. 3;R68, T;R23/24/25, C;R34, Xn;R48/20/21/22 **CLP:** -					

Other components below reportable levels 10 - < 20

List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.
DSD: Directive 67/548/EEC.
M: M-factor
vPvB: very persistent and very bioaccumulative substance.
PBT: persistent, bioaccumulative and toxic substance.
#: This substance has been assigned Community workplace exposure limit(s).

Composition comments The full text for all R- and H-phrases is displayed in section 16.

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. Show this safety data sheet to the doctor in attendance. 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. Oxygen or artificial respiration if needed. Call a POISON CENTRE or doctor/physician if you feel unwell.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

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 immediately.

Ingestion Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Skin irritation. May cause redness and pain.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. 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 Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

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.

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.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapours and spray mists. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8.

For emergency responders

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

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

Never return spills to original containers for re-use.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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. Do not get this material in contact with eyes. Avoid inhalation of vapours and spray mists. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. 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. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

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 original 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).

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	Ceiling	550 mg/m3
		100 ppm
	MAK	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	MAK	83 mg/m3
		20 ppm
	STEL	208 mg/m3
		50 ppm
Ethanol (CAS 64-17-5)	Ceiling	3800 mg/m3

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value
		2000 ppm
	MAK	1900 mg/m3
		1000 ppm
Ethyl benzene (CAS 100-41-4)	Ceiling	880 mg/m3
		200 ppm
	MAK	440 mg/m3
		100 ppm
Isobutyl alcohol (CAS 78-83-1)	MAK	150 mg/m3
		50 ppm
	STEL	600 mg/m3
		200 ppm
Methanol (CAS 67-56-1)	MAK	260 mg/m3
		200 ppm
	STEL	1040 mg/m3
		800 ppm
Phenol (CAS 108-95-2)	MAK	8 mg/m3
		2 ppm
	STEL	6 mg/m3
		4 ppm
Toluene (CAS 108-88-3)	MAK	190 mg/m3
		50 ppm
	STEL	380 mg/m3
		100 ppm
Xylene (CAS 1330-20-7)	MAK	221 mg/m3
		50 ppm
	STEL	442 mg/m3
		100 ppm

Austria. TRK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value	Form
Zinc chromate (CAS 13530-65-9)	STEL	0,4 mg/m3	
		0,2 mg/m3	Inhalable fraction.
	TWA	0,1 mg/m3	
		0,05 mg/m3	Inhalable fraction.

Belgium. Exposure Limit Values.

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethanol (CAS 64-17-5)	TWA	1907 mg/m3
		1000 ppm
Ethyl benzene (CAS 100-41-4)	STEL	551 mg/m3
		125 ppm
	TWA	442 mg/m3
		100 ppm
Isobutyl alcohol (CAS 78-83-1)	TWA	154 mg/m3
		50 ppm
Methanol (CAS 67-56-1)	STEL	333 mg/m3
		250 ppm
	TWA	266 mg/m3

Belgium. Exposure Limit Values.

Components	Type	Value
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	77 mg/m3
		20 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm
Zinc chromate (CAS 13530-65-9)	TWA	0,01 mg/m3

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

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	200 mg/m3
	TWA	50 mg/m3
Ethanol (CAS 64-17-5)	TWA	1000 mg/m3
Ethyl benzene (CAS 100-41-4)	STEL	545 mg/m3
	TWA	435 mg/m3
Methanol (CAS 67-56-1)	TWA	260 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	192 mg/m3
		50 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm
Zinc chromate (CAS 13530-65-9)	TWA	0,05 mg/m3

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

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	MAC	275 mg/m3
		50 ppm
	STEL	550 mg/m3
		100 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	MAC	83 mg/m3
		20 ppm
	STEL	208 mg/m3
		50 ppm
Ethanol (CAS 64-17-5)	MAC	1900 mg/m3
		1000 ppm
Ethyl benzene (CAS 100-41-4)	MAC	442 mg/m3
		100 ppm

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

Components	Type	Value
	STEL	884 mg/m3
		200 ppm
Isobutyl alcohol (CAS 78-83-1)	MAC	154 mg/m3
		50 ppm
	STEL	231 mg/m3
		75 ppm
Methanol (CAS 67-56-1)	MAC	260 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	MAC	8 mg/m3
		2 ppm
	STEL	6 mg/m3
		4 ppm
Toluene (CAS 108-88-3)	MAC	192 mg/m3
		50 ppm
	STEL	384 mg/m3
		100 ppm
Xylene (CAS 1330-20-7)	MAC	221 mg/m3
		50 ppm
	STEL	442 mg/m3
		100 ppm
Zinc chromate (CAS 13530-65-9)	MAC	0,05 mg/m3

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

Components	Type	Value
Isobutyl alcohol (CAS 78-83-1)	TWA	150 mg/m3
		50 ppm

Czech Republic. OELs. Government Decree 361

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	Ceiling	550 mg/m3
	TWA	270 mg/m3
4-Methyl-2-pentanone (CAS 108-10-1)	Ceiling	200 mg/m3
	TWA	80 mg/m3
Ethanol (CAS 64-17-5)	Ceiling	3000 mg/m3
	TWA	1000 mg/m3
Ethyl benzene (CAS 100-41-4)	Ceiling	500 mg/m3
	TWA	200 mg/m3
Isobutyl alcohol (CAS 78-83-1)	Ceiling	600 mg/m3
	TWA	300 mg/m3
Methanol (CAS 67-56-1)	Ceiling	1000 mg/m3
	TWA	250 mg/m3
Phenol (CAS 108-95-2)	Ceiling	15 mg/m3
	TWA	7,5 mg/m3
Toluene (CAS 108-88-3)	Ceiling	500 mg/m3
	TWA	200 mg/m3
Xylene (CAS 1330-20-7)	Ceiling	400 mg/m3
	TWA	200 mg/m3
Zinc chromate (CAS 13530-65-9)	Ceiling	0,1 mg/m3
	TWA	0,05 mg/m3

Denmark. Exposure Limit Values

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	TLV	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	TLV	83 mg/m3

Denmark. Exposure Limit Values

Components	Type	Value
		20 ppm
Ethanol (CAS 64-17-5)	TLV	1900 mg/m3
		1000 ppm
Ethyl benzene (CAS 100-41-4)	TLV	217 mg/m3
		50 ppm
Isobutyl alcohol (CAS 78-83-1)	Ceiling	150 mg/m3
		50 ppm
Methanol (CAS 67-56-1)	TLV	260 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	TLV	4 mg/m3
		1 ppm
Toluene (CAS 108-88-3)	TLV	94 mg/m3
		25 ppm
Xylene (CAS 1330-20-7)	TLV	109 mg/m3
		25 ppm
Zinc chromate (CAS 13530-65-9)	TLV	0,005 mg/m3

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

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3
		1000 ppm
	TWA	1000 mg/m3
		500 ppm
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Isobutyl alcohol (CAS 78-83-1)	TWA	150 mg/m3
		50 ppm
Methanol (CAS 67-56-1)	STEL	350 mg/m3
		250 ppm
	TWA	250 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	192 mg/m3
		50 ppm
Xylene (CAS 1330-20-7)	STEL	450 mg/m3
		100 ppm
	TWA	200 mg/m3
		50 ppm
Zinc chromate (CAS 13530-65-9)	TWA	0,02 mg/m3

Finland. Workplace Exposure Limits

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	210 mg/m3
		50 ppm
	TWA	80 mg/m3
		20 ppm
Ethanol (CAS 64-17-5)	STEL	2500 mg/m3
		1300 ppm
	TWA	1900 mg/m3
		1000 ppm
Ethyl benzene (CAS 100-41-4)	STEL	880 mg/m3
		200 ppm
	TWA	220 mg/m3
		50 ppm
Isobutyl alcohol (CAS 78-83-1)	STEL	230 mg/m3
		75 ppm
	TWA	150 mg/m3
		50 ppm
Methanol (CAS 67-56-1)	STEL	330 mg/m3
		250 ppm
	TWA	270 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	380 mg/m3
		100 ppm
	TWA	81 mg/m3
		25 ppm
Xylene (CAS 1330-20-7)	STEL	440 mg/m3
		100 ppm
	TWA	220 mg/m3
		50 ppm

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

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	VLE	550 mg/m3
		110 ppm
	VME	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	VLE	208 mg/m3
		50 ppm
	VME	83 mg/m3
		20 ppm
Ethanol (CAS 64-17-5)	VLE	9500 mg/m3
		5000 ppm
	VME	1900 mg/m3
		1000 ppm
Ethyl benzene (CAS 100-41-4)	VLE	442 mg/m3
		100 ppm
	VME	88,4 mg/m3
		20 ppm
Isobutyl alcohol (CAS 78-83-1)	VME	150 mg/m3

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

Components	Type	Value
		50 ppm
Methanol (CAS 67-56-1)	VLE	1300 mg/m3
		1000 ppm
	VME	260 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	VLE	15,6 mg/m3
		4 ppm
	VME	7,8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	VLE	384 mg/m3
		100 ppm
	VME	76,8 mg/m3
		20 ppm
Xylene (CAS 1330-20-7)	VLE	442 mg/m3
		100 ppm
	VME	221 mg/m3
		50 ppm
Zinc chromate (CAS 13530-65-9)	VLE	0,005 mg/m3
	VME	0,001 mg/m3

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

Components	Type	Value	Form
1-Methoxy-2-propyl acetate (CAS 108-65-6)	TWA	270 mg/m3	
		50 ppm	
4-Methyl-2-pentanone (CAS 108-10-1)	TWA	83 mg/m3	
		20 ppm	
Ethanol (CAS 64-17-5)	TWA	960 mg/m3	
		500 ppm	
Ethyl benzene (CAS 100-41-4)	TWA	88 mg/m3	
		20 ppm	
Isobutyl alcohol (CAS 78-83-1)	TWA	310 mg/m3	
		100 ppm	
Methanol (CAS 67-56-1)	TWA	270 mg/m3	
		200 ppm	
Toluene (CAS 108-88-3)	TWA	190 mg/m3	
		50 ppm	
Xylene (CAS 1330-20-7)	TWA	440 mg/m3	
		100 ppm	
Zinc chromate (CAS 13530-65-9)	TWA	2 mg/m3	Inhalable fraction.
		0,1 mg/m3	Respirable fraction.

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

Components	Type	Value	Form
1-Methoxy-2-propyl acetate (CAS 108-65-6)	AGW	270 mg/m3	
		50 ppm	
4-Methyl-2-pentanone (CAS 108-10-1)	AGW	83 mg/m3	
		20 ppm	
Ethanol (CAS 64-17-5)	AGW	960 mg/m3	
		500 ppm	
Ethyl benzene (CAS 100-41-4)	AGW	88 mg/m3	
		20 ppm	
Isobutyl alcohol (CAS 78-83-1)	AGW	310 mg/m3	
		100 ppm	
Methanol (CAS 67-56-1)	AGW	270 mg/m3	

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

Components	Type	Value	Form
		200 ppm	
Phenol (CAS 108-95-2)	AGW	8 mg/m3	Vapor and aerosol.
		2 ppm	Vapor and aerosol.
Toluene (CAS 108-88-3)	AGW	190 mg/m3	
		50 ppm	
Xylene (CAS 1330-20-7)	AGW	440 mg/m3	
		100 ppm	

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

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	410 mg/m3
		100 ppm
	TWA	410 mg/m3
		100 ppm
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3
		1000 ppm
Ethyl benzene (CAS 100-41-4)	STEL	545 mg/m3
		125 ppm
	TWA	435 mg/m3
		100 ppm
Isobutyl alcohol (CAS 78-83-1)	STEL	300 mg/m3
		100 ppm
	TWA	300 mg/m3
		100 ppm
Methanol (CAS 67-56-1)	STEL	325 mg/m3
		250 ppm
	TWA	260 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	192 mg/m3
		50 ppm
Xylene (CAS 1330-20-7)	STEL	650 mg/m3
		150 ppm
	TWA	435 mg/m3
		100 ppm

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
	TWA	275 mg/m3
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
	TWA	83 mg/m3
Ethanol (CAS 64-17-5)	STEL	7600 mg/m3
	TWA	1900 mg/m3
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3
	TWA	442 mg/m3
Methanol (CAS 67-56-1)	TWA	260 mg/m3
Phenol (CAS 108-95-2)	STEL	16 mg/m3

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
	TWA	8 mg/m3
Toluene (CAS 108-88-3)	STEL	380 mg/m3
	TWA	190 mg/m3
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
	TWA	221 mg/m3
Zinc chromate (CAS 13530-65-9)	Ceiling	0,01 mg/m3

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

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3
		1000 ppm
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	200 mg/m3
		50 ppm
Isobutyl alcohol (CAS 78-83-1)	STEL	150 mg/m3
		50 ppm
Methanol (CAS 67-56-1)	TWA	260 mg/m3
		200 ppm
Toluene (CAS 108-88-3)	STEL	188 mg/m3
		50 ppm
	TWA	94 mg/m3
		25 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	109 mg/m3
		25 ppm

Ireland. Occupational Exposure Limits

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Isobutyl alcohol (CAS 78-83-1)	STEL	225 mg/m3
		75 ppm
	TWA	150 mg/m3
		50 ppm

Ireland. Occupational Exposure Limits

Components	Type	Value
Methanol (CAS 67-56-1)	TWA	260 mg/m3 200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3 4 ppm
	TWA	8 mg/m3 2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3 100 ppm
	TWA	192 mg/m3 50 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm
Zinc chromate (CAS 13530-65-9)	TWA	0,01 mg/m3

Italy. Occupational Exposure Limits

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3 100 ppm
	TWA	275 mg/m3 50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3 50 ppm
	TWA	83 mg/m3 20 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3 200 ppm
	TWA	442 mg/m3 100 ppm
Isobutyl alcohol (CAS 78-83-1)	TWA	50 ppm
Methanol (CAS 67-56-1)	TWA	260 mg/m3 200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3 4 ppm
	TWA	8 mg/m3 2 ppm
Toluene (CAS 108-88-3)	TWA	192 mg/m3 50 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm
Zinc chromate (CAS 13530-65-9)	TWA	0,01 mg/m3

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

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3 100 ppm
	TWA	275 mg/m3 50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3 50 ppm
	TWA	83 mg/m3 20 ppm

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

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1000 mg/m3
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Isobutyl alcohol (CAS 78-83-1)	TWA	10 mg/m3
Methanol (CAS 67-56-1)	TWA	260 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	150 mg/m3
		40 ppm
	TWA	50 mg/m3
		14 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm
Zinc chromate (CAS 13530-65-9)	TWA	0,01 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	400 mg/m3
		75 ppm
	TWA	250 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3
		1000 ppm
	TWA	1000 mg/m3
		500 ppm
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Isobutyl alcohol (CAS 78-83-1)	TWA	10 mg/m3
Methanol (CAS 67-56-1)	TWA	260 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	192 mg/m3
		50 ppm
Xylene (CAS 1330-20-7)	STEL	450 mg/m3
		100 ppm
	TWA	200 mg/m3
		50 ppm
Zinc chromate (CAS 13530-65-9)	STEL	0,015 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value
	TWA	0,005 mg/m3

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

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Methanol (CAS 67-56-1)	TWA	260 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	192 mg/m3
		50 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

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

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Methanol (CAS 67-56-1)	TWA	260 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	192 mg/m3
		50 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm

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

Components	Type	Value
	TWA	221 mg/m3
		50 ppm

Netherlands. OELs (binding)

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	TWA	550 mg/m3
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
	TWA	104 mg/m3
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3
	TWA	260 mg/m3
Ethyl benzene (CAS 100-41-4)	STEL	430 mg/m3
	TWA	215 mg/m3
Methanol (CAS 67-56-1)	TWA	133 mg/m3
Phenol (CAS 108-95-2)	TWA	8 mg/m3
Toluene (CAS 108-88-3)	STEL	384 mg/m3
	TWA	150 mg/m3
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
	TWA	210 mg/m3
Zinc chromate (CAS 13530-65-9)	STEL	0,01 mg/m3
	TWA	0,025 mg/m3

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	TLV	270 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TLV	83 mg/m3
		20 ppm
Ethanol (CAS 64-17-5)	TLV	950 mg/m3
		500 ppm
Ethyl benzene (CAS 100-41-4)	TLV	20 mg/m3
		5 ppm
Isobutyl alcohol (CAS 78-83-1)	Ceiling	75 mg/m3
		25 ppm
Methanol (CAS 67-56-1)	TLV	130 mg/m3
		100 ppm
Phenol (CAS 108-95-2)	STEL	12 mg/m3
		3 ppm
	TLV	4 mg/m3
		1 ppm
Toluene (CAS 108-88-3)	TLV	94 mg/m3
		25 ppm
Xylene (CAS 1330-20-7)	TLV	108 mg/m3
		25 ppm

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	520 mg/m3
	TWA	260 mg/m3
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	200 mg/m3
	TWA	83 mg/m3
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value
Ethyl benzene (CAS 100-41-4)	STEL	400 mg/m3
	TWA	200 mg/m3
Isobutyl alcohol (CAS 78-83-1)	STEL	200 mg/m3
	TWA	100 mg/m3
Methanol (CAS 67-56-1)	STEL	300 mg/m3
	TWA	100 mg/m3
Phenol (CAS 108-95-2)	STEL	16 mg/m3
	TWA	7,8 mg/m3
Toluene (CAS 108-88-3)	STEL	200 mg/m3
	TWA	100 mg/m3
Xylene (CAS 1330-20-7)	TWA	100 mg/m3

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

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Methanol (CAS 67-56-1)	TWA	260 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	192 mg/m3
		50 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

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

Components	Type	Value
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	75 ppm
	TWA	50 ppm
Ethanol (CAS 64-17-5)	TWA	1000 ppm
Ethyl benzene (CAS 100-41-4)	STEL	125 ppm
	TWA	100 ppm
Isobutyl alcohol (CAS 78-83-1)	TWA	50 ppm
Methanol (CAS 67-56-1)	STEL	250 ppm
	TWA	200 ppm
Phenol (CAS 108-95-2)	TWA	5 ppm
Toluene (CAS 108-88-3)	TWA	50 ppm
Xylene (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

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

Components	Type	Value
Zinc chromate (CAS 13530-65-9)	TWA	0,01 mg/m3

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

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	200 mg/m3
		20 ppm
Ethanol (CAS 64-17-5)	STEL	9500 mg/m3
		5000 ppm
	TWA	1900 mg/m3
		1000 ppm
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Isobutyl alcohol (CAS 78-83-1)	STEL	200 mg/m3
		66 ppm
	TWA	100 mg/m3
		33 ppm
Methanol (CAS 67-56-1)	STEL	5 ppm
	TWA	260 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	192 mg/m3
		50 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm
Zinc chromate (CAS 13530-65-9)	TWA	0,01 mg/m3

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

Components	Type	Value	Form
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3	
		100 ppm	
	TWA	275 mg/m3	
		50 ppm	
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	166 mg/m3	
		40 ppm	
	TWA	83 mg/m3	
		20 ppm	
Ethanol (CAS 64-17-5)	STEL	1920 mg/m3	
		1000 ppm	
	TWA	960 mg/m3	
		500 ppm	

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

Components	Type	Value	Form
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	442 mg/m3	
		100 ppm	
Isobutyl alcohol (CAS 78-83-1)	TWA	310 mg/m3	
		100 ppm	
Methanol (CAS 67-56-1)	TWA	260 mg/m3	
		200 ppm	
Phenol (CAS 108-95-2)	STEL	16 mg/m3	
		4 ppm	
	TWA	8 mg/m3	
		2 ppm	
Toluene (CAS 108-88-3)	STEL	384 mg/m3	
		100 ppm	
	TWA	192 mg/m3	
		50 ppm	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	
Zinc chromate (CAS 13530-65-9)	TWA	2 mg/m3	Inhalable fraction.
		0,1 mg/m3	Respirable fraction.

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

Components	Type	Value	Form
1-Methoxy-2-propyl acetate (CAS 108-65-6)	TWA	275 mg/m3	
		50 ppm	
4-Methyl-2-pentanone (CAS 108-10-1)	TWA	83 mg/m3	
		20 ppm	
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3	
		1000 ppm	
Ethyl benzene (CAS 100-41-4)	TWA	442 mg/m3	
		100 ppm	
Isobutyl alcohol (CAS 78-83-1)	TWA	310 mg/m3	
		100 ppm	
Methanol (CAS 67-56-1)	TWA	260 mg/m3	
		200 ppm	
Phenol (CAS 108-95-2)	TWA	8 mg/m3	
		2 ppm	
Toluene (CAS 108-88-3)	TWA	192 mg/m3	
		50 ppm	
Xylene (CAS 1330-20-7)	TWA	221 mg/m3	
		50 ppm	
Zinc chromate (CAS 13530-65-9)	TWA	0,05 mg/m3	Inhalable fraction.

Spain. Occupational Exposure Limits

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3

Spain. Occupational Exposure Limits

Components	Type	Value
		20 ppm
Ethanol (CAS 64-17-5)	STEL	1910 mg/m3
		1000 ppm
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	441 mg/m3
		100 ppm
Isobutyl alcohol (CAS 78-83-1)	TWA	154 mg/m3
		50 ppm
Methanol (CAS 67-56-1)	TWA	266 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	192 mg/m3
		50 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

Sweden. Occupational Exposure Limit Values

Components	Type	Value	Form
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	400 mg/m3	
		75 ppm	
	TWA	250 mg/m3	
		50 ppm	
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	200 mg/m3	
		50 ppm	
	TWA	100 mg/m3	
		25 ppm	
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3	
		1000 ppm	
	TWA	1000 mg/m3	
		500 ppm	
Ethyl benzene (CAS 100-41-4)	STEL	450 mg/m3	
		100 ppm	
	TWA	200 mg/m3	
		50 ppm	
Isobutyl alcohol (CAS 78-83-1)	STEL	250 mg/m3	
		75 ppm	
	TWA	150 mg/m3	
		50 ppm	
Methanol (CAS 67-56-1)	STEL	350 mg/m3	
		250 ppm	
	TWA	250 mg/m3	
		200 ppm	
Phenol (CAS 108-95-2)	STEL	8 mg/m3	
		2 ppm	
	TWA	4 mg/m3	
		1 ppm	
Toluene (CAS 108-88-3)	STEL	384 mg/m3	
		100 ppm	
	TWA	192 mg/m3	

Sweden. Occupational Exposure Limit Values

Components	Type	Value	Form
		50 ppm	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	
Zinc chromate (CAS 13530-65-9)	STEL	0,015 mg/m3	Total dust.
	TWA	0,005 mg/m3	Total dust.

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	275 mg/m3	
		50 ppm	
	TWA	275 mg/m3	
		50 ppm	
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	164 mg/m3	
		40 ppm	
	TWA	82 mg/m3	
		20 ppm	
Ethanol (CAS 64-17-5)	STEL	1920 mg/m3	
		1000 ppm	
	TWA	960 mg/m3	
		500 ppm	
Ethyl benzene (CAS 100-41-4)	STEL	220 mg/m3	
		50 ppm	
	TWA	220 mg/m3	
		50 ppm	
Isobutyl alcohol (CAS 78-83-1)	STEL	150 mg/m3	
		50 ppm	
	TWA	150 mg/m3	
		50 ppm	
Methanol (CAS 67-56-1)	STEL	1040 mg/m3	
		800 ppm	
	TWA	260 mg/m3	
		200 ppm	
Phenol (CAS 108-95-2)	STEL	19 mg/m3	
		5 ppm	
	TWA	19 mg/m3	
		5 ppm	
Toluene (CAS 108-88-3)	STEL	760 mg/m3	
		200 ppm	
	TWA	190 mg/m3	
		50 ppm	
Xylene (CAS 1330-20-7)	STEL	870 mg/m3	
		200 ppm	
	TWA	435 mg/m3	
		100 ppm	
Zinc chromate (CAS 13530-65-9)	STEL	4 mg/m3	Inhalable dust.
		0,4 mg/m3	Respirable dust.
	TWA	0,01 mg/m3	Inhalable dust.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	548 mg/m3
		100 ppm
	TWA	274 mg/m3
		50 ppm

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	416 mg/m3
		100 ppm
	TWA	208 mg/m3
		50 ppm
Ethanol (CAS 64-17-5)	TWA	1920 mg/m3
		1000 ppm
Ethyl benzene (CAS 100-41-4)	STEL	552 mg/m3
		125 ppm
	TWA	441 mg/m3
		100 ppm
Isobutyl alcohol (CAS 78-83-1)	STEL	231 mg/m3
		75 ppm
	TWA	154 mg/m3
		50 ppm
Methanol (CAS 67-56-1)	STEL	333 mg/m3
		250 ppm
	TWA	266 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	7,8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	191 mg/m3
		50 ppm
Xylene (CAS 1330-20-7)	STEL	441 mg/m3
		100 ppm
	TWA	220 mg/m3
		50 ppm
Zinc chromate (CAS 13530-65-9)	TWA	0,05 mg/m3

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

Components	Type	Value
1-Methoxy-2-propyl acetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
4-Methyl-2-pentanone (CAS 108-10-1)	STEL	208 mg/m3
		50 ppm
	TWA	83 mg/m3
		20 ppm
Ethyl benzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Methanol (CAS 67-56-1)	TWA	260 mg/m3
		200 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	192 mg/m3
		50 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3

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

Components	Type	Value
		100 ppm
	TWA	221 mg/m3
		50 ppm

Biological limit values

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

Components	Value	Determinant	Specimen	Sampling time
Ethyl benzene (CAS 100-41-4)	1100 µmol/mmol	Mandelic acid	Creatinine in urine	*
	1500 mg/g	Mandelic acid	Creatinine in urine	*
Methanol (CAS 67-56-1)	15 mg/l	Methanol	Urine	*
	0,47 mmol/l	Methanol	Urine	*
Phenol (CAS 108-95-2)	360 µmol/mmol	Phenol	Creatinine in urine	*
	300 mg/g	Phenol	Creatinine in urine	*
Toluene (CAS 108-88-3)	1000 µmol/mmol	Hippuric acid	Creatinine in urine	*
	1600 mg/g	Hippuric acid	Creatinine in urine	*
Xylene (CAS 1330-20-7)	820 µmol/mmol	Methylhippuric acids	Creatinine in urine	*
	1400 mg/g	Methylhippuric acids	Creatinine in urine	*
Zinc chromate (CAS 13530-65-9)	0,065 µmol/mmol	Total chromium	Creatinine in urine	*
	0,03 mg/g	Total chromium	Creatinine in urine	*

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

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

Components	Value	Determinant	Specimen	Sampling time
Ethyl benzene (CAS 100-41-4)	5,2 mmol/l	Mandelic acid	Urine	*
Phenol (CAS 108-95-2)	1,3 mmol/l	Total phenol	Urine	*
Toluene (CAS 108-88-3)	500 nmol/l	Toluene concentration	Blood	*
Xylene (CAS 1330-20-7)	5 mmol/l	Methylhippuric acids	Urine	*
Zinc chromate (CAS 13530-65-9)	0,2 umol/l	Chromium	Urine	*

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

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

Components	Value	Determinant	Specimen	Sampling time
4-Methyl-2-pentanone (CAS 108-10-1)	2 mg/l	Méthylisobutylcétone	Urine	*
Ethyl benzene (CAS 100-41-4)	1500 mg/g	Acide mandélique	Creatinine in urine	*
Methanol (CAS 67-56-1)	15 mg/l	Méthanol	Urine	*
Phenol (CAS 108-95-2)	250 mg/g	Phènol total	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	*
Xylene (CAS 1330-20-7)	1500 mg/g	Acides méthylhippuriques	Creatinine in urine	*
Zinc chromate (CAS 13530-65-9)	0,03 mg/g	Chrome total	Creatinine in urine	*
	0,01 mg/g	Chrome total	Creatinine in urine	*

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

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

Components	Value	Determinant	Specimen	Sampling time
4-Methyl-2-pentanone (CAS 108-10-1)	3,5 mg/l	4-Methylpentan-2-on	Urine	*
Ethyl benzene (CAS 100-41-4)	300 mg/l	Mandelsäure plus Phenylglyoxylsäure	Urine	*
Methanol (CAS 67-56-1)	30 mg/l	Methanol	Urine	*
Phenol (CAS 108-95-2)	120 mg/g	Phenol (nach Hydrolyse)	Creatinine in urine	*
Toluene (CAS 108-88-3)	600 µg/l	Toluol	Blood	*
	1,5 mg/l	o-Kresol (nach Hydrolyse)	Urine	*
Xylene (CAS 1330-20-7)	2000 mg/l	Methylhippur-(Tolur-) säure (alle Isomere)	Urine	*
	1,5 mg/l	Xylol	Blood	*

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

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

Components	Value	Determinant	Specimen	Sampling time
Ethyl benzene (CAS 100-41-4)	1500 mg/g	mandelic acid	Creatinine in urine	*
	1110 µmol/mmol	mandelic acid	Creatinine in urine	*
Phenol (CAS 108-95-2)	300 mg/g	Phenol	Creatinine in urine	*
	360 µmol/mmol	Phenol	Creatinine in urine	*
Toluene (CAS 108-88-3)	1 mg/g	o-crezol	Creatinine in urine	*
	1,05 µmol/mmol	o-crezol	Creatinine in urine	*
Xylene (CAS 1330-20-7)	1500 mg/g	methyl hippuric acids	Creatinine in urine	*
	860 µmol/mmol	methyl hippuric acids	Creatinine in urine	*
Zinc chromate (CAS 13530-65-9)	0,02 mg/g	chromium	Creatinine in urine	*
	0,043 µmol/mmol	chromium	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-Methyl-2-pentanone (CAS 108-10-1)	2,36 mg/g	Methyl isobutyl ketone	Creatinine in urine	*
	3,5 mg/l	Methyl isobutyl ketone	Urine	*
Ethyl benzene (CAS 100-41-4)	8,03 mg/g	2-ethylphenol	Creatinine in urine	*
	12 mg/l	2-ethylphenol	Urine	*
Methanol (CAS 67-56-1)	20 mg/g	Methanol	Creatinine in urine	*
	30 mg/l	Methanol	Urine	*
Phenol (CAS 108-95-2)	133,7 mg/g	Phenol	Creatinine in urine	*
	200 mg/l	Phenol	Urine	*
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	*

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
	1,5 mg/l	o-cresol (Phenol, 2-methyl-)	Urine	*
Xylene (CAS 1330-20-7)	1334 mg/g	Methylhippuric acids	Creatinine in urine	*
	2000 mg/l	Methylhippuric acids	Urine	*
	1,5 mg/l	Xylene	Blood	*

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

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

Components	Value	Determinant	Specimen	Sampling time
4-Methyl-2-pentanone (CAS 108-10-1)	1 mg/l	Metilisobutilcetona	Urine	*
Ethyl benzene (CAS 100-41-4)	700 mg/g	Suma del acido mandélico y el ácido fenilglioxílico	Creatinine in urine	*
Methanol (CAS 67-56-1)	15 mg/l	Metanol	Urine	*
Phenol (CAS 108-95-2)	120 mg/g	Fenol, con hidrólisis	Creatinine in urine	*
Toluene (CAS 108-88-3)	1,6 g/g	Ácido hipúrico	Creatinine in urine	*
	0,5 mg/l	o-cresol (Phenol, 2-methyl-)	Urine	*
	0,05 mg/l	Tolueno	Blood	*
Xylene (CAS 1330-20-7)	1 g/g	Ácidos metilhipúricos	Creatinine in urine	*
Zinc chromate (CAS 13530-65-9)	25 µg/l	Cromo total	Urine	*
	10 µg/l	Cromo total	Urine	*

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

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

Components	Value	Determinant	Specimen	Sampling time
4-Methyl-2-pentanone (CAS 108-10-1)	2 mg/l	4-Methylpentan-2-on	Urine	*
Ethyl benzene (CAS 100-41-4)	800 mg/l	Mandelsäure plus Phenylglyoxylsäure	Urine	*
Methanol (CAS 67-56-1)	30 mg/l	Methanol	Urine	*
Phenol (CAS 108-95-2)	250 mg/g	Phenol	Creatinine in urine	*
Toluene (CAS 108-88-3)	600 µg/l	Toluol	Blood	*
	2 g/g	Hippursäure	Creatinine in urine	*
	0,5 mg/l	o-Kresol	Urine	*
Xylene (CAS 1330-20-7)	1,5 g/g	Methyl-Hippursäure	Creatinine in urine	*
	1,5 mg/l	Xylol	Blood	*
Zinc chromate (CAS 13530-65-9)	20 µg/l	Chrom	Urine	*

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

UK. EH40 Biological Monitoring Guidance Values (BMGVs)

Components	Value	Determinant	Specimen	Sampling time
4-Methyl-2-pentanone (CAS 108-10-1)	20 umol/l	4-Methylpentan-2-one	Urine	*
Xylene (CAS 1330-20-7)	650 mmol/mol	Methyl hippuric acid	Creatinine in urine	*
Zinc chromate (CAS 13530-65-9)	10 umol/mol	Chromium	Creatinine in urine	*

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

Recommended monitoring procedures	Follow standard monitoring procedures.
Derived no-effect level (DNEL)	Not available.
Predicted no effect concentrations (PNECs)	Not available.

Exposure guidelines

EU Exposure Limit Values: Skin designation

1-Methoxy-2-propyl acetate (CAS 108-65-6)	Can be absorbed through the skin.
Ethyl benzene (CAS 100-41-4)	Can be absorbed through the skin.
Methanol (CAS 67-56-1)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.
Xylene (CAS 1330-20-7)	Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls	Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) 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. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

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.
Skin protection	
- Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
- Other	Wear appropriate chemical resistant clothing.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Environmental exposure controls	Inform appropriate managerial or supervisory personnel of all environmental releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Colour	Light yellow to dark yellow.
Odour	Solvent.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	-114,1 °C (-173,38 °F) estimated
Initial boiling point and boiling range	78,5 °C (173,3 °F) estimated
Flash point	4,4 °C (40,0 °F) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	1,2 % estimated
Flammability limit - upper (%)	10,9 % estimated

Vapour pressure	61,44 hPa estimated
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	362,78 °C (685 °F) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidizing properties	Not available.

9.2. Other information

Density	7,27 lbs/gal
Percent volatile	85,05 %
Specific gravity	0,87
VOC	6,2 lbs/gal Regulatory 6,2 lbs/gal Material 741 g/l Regulatory 741 g/l Material

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. Contact with incompatible materials.
10.5. Incompatible materials	Strong acids. Strong oxidising agents. Halogens.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Inhalation	Harmful if inhaled.
Skin contact	Harmful in contact with skin. Causes skin irritation.
Eye contact	Causes serious eye damage.
Ingestion	Harmful if swallowed.
Symptoms	Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Skin irritation. May cause redness and pain.

11.1. Information on toxicological effects

Acute toxicity	Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed.

Components	Species	Test results
4-Methyl-2-pentanone (CAS 108-10-1)		
Acute		
Dermal		
LD50	Rabbit	> 16000 mg/kg
Inhalation		
LC50	Rat	8,2 mg/l, 4 Hours
Oral		
LD50	Rat	2080 mg/kg

Components	Species	Test results
Ethanol (CAS 64-17-5)		
Acute		
Inhalation		
LC50	Mouse	39 mg/l, 4 Hours
	Rat	20000 ppm, 10 Hours
Oral		
LD50	Guinea pig	5,6 g/kg
	Mouse	3450 mg/kg
	Rat	6,2 g/kg
Ethyl benzene (CAS 100-41-4)		
Acute		
Dermal		
LD50	Rabbit	17800 mg/kg
Oral		
LD50	Rat	3500 mg/kg
Isobutyl alcohol (CAS 78-83-1)		
Acute		
Dermal		
LD50	Rabbit	3392 mg/kg
Inhalation		
LC50	Rat	8000 ppm, 4 Hours
LD50	Guinea pig	19,9 mg/l
	Rabbit	26,25 mg/l
	Rat	19,2 mg/l
Oral		
LD50	Mouse	3500 mg/kg
	Rat	2,46 g/kg
Methanol (CAS 67-56-1)		
Acute		
Dermal		
LD50	Rabbit	15800 mg/kg
Inhalation		
LC50	Rat	64000 ppm, 4 Hours
		87,5 mg/l, 6 Hours
Oral		
LD50	Monkey	2 g/kg
	Mouse	7300 mg/kg
	Rabbit	14,4 g/kg
	Rat	5628 mg/kg
Phenol (CAS 108-95-2)		
Acute		
Dermal		
LD50	Rabbit	850 mg/kg
	Rat	669 mg/kg
Oral		
LD50	Mouse	270 mg/kg
	Rat	317 mg/kg
Toluene (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	12124 mg/kg
		14,1 ml/kg

Components	Species	Test results
Inhalation		
LC50	Mouse	5320 ppm, 8 Hours
		400 ppm, 24 Hours
	Rat	26700 ppm, 1 Hours
		12200 ppm, 2 Hours
		8000 ppm, 4 Hours
Oral		
LD50	Rat	2,6 g/kg
Xylene (CAS 1330-20-7)		
Acute		
Dermal		
LD50	Rabbit	> 43 g/kg
Inhalation		
LC50	Mouse	3907 mg/l, 6 Hours
	Rat	6350 mg/l, 4 Hours
Oral		
LD50	Mouse	1590 mg/kg
	Rat	3523 - 8600 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory sensitisation Due to partial or complete lack of data the classification is not possible.

Skin sensitisation Due to partial or complete lack of data the classification is not possible.

Germ cell mutagenicity Suspected of causing genetic defects.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

4-Methyl-2-pentanone (CAS 108-10-1)	2B Possibly carcinogenic to humans.
Ethyl benzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.
Phenol (CAS 108-95-2)	3 Not classifiable as to carcinogenicity to humans.
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.
Zinc chromate (CAS 13530-65-9)	1 Carcinogenic to humans.

Reproductive toxicity Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals. Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Mixture versus substance information No information available.

Other information Not available.

SECTION 12: Ecological information

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

Components		Species	Test results
4-Methyl-2-pentanone (CAS 108-10-1)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	492 - 593 mg/l, 96 hours
Ethanol (CAS 64-17-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	7,7 - 11,2 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours

Components		Species	Test results
Ethyl benzene (CAS 100-41-4)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1,37 - 4,4 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	7,5 - 11 mg/l, 96 hours
Isobutyl alcohol (CAS 78-83-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	950 - 1200 mg/l, 48 hours
Fish	LC50	Bleak (Alburnus alburnus)	1000 - 3000 mg/l, 96 hours
Methanol (CAS 67-56-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
Phenol (CAS 108-95-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia obtusa)	4,7 - 6,4 mg/l, 48 hours
Fish	LC50	Asiatic knifefish (Notopterus notopterus)	8 - 8,25 mg/l, 96 hours
Toluene (CAS 108-88-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5,46 - 9,83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8,11 mg/l, 96 hours
Xylene (CAS 1330-20-7)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	7,711 - 9,591 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

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)

4-Methyl-2-pentanone	1,31
Ethanol	-0,31
Ethyl benzene	3,15
Isobutyl alcohol	0,76
Methanol	-0,77
Phenol	1,46
Toluene	2,73
Xylene	3,12 - 3,2

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment Not available.

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number	UN1263
14.2. UN proper shipping name	Paint, 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	Yes
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, 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	Yes
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, 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	Yes
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, Paint Related Material
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
14.4. Packing group	II
14.5. Environmental hazards	Yes
ERG Code	3H
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

14.1. UN number	UN1263
14.2. UN proper shipping name	Paint, Paint Related Material

14.3. Transport hazard class(es)

Class	3
Subsidiary risk	-
14.4. Packing group	II
14.5. Environmental hazards	
Marine pollutant	Yes
EmS	F-E, S-E
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.

ADN; ADR; IATA; IMDG; RID

Marine pollutant

General information	IMDG Regulated Marine Pollutant.

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, as amended

Not listed.

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

Not listed.

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

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended

Not listed.

Regulation (EC) No. 689/2008 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

Not listed.

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

Zinc chromate (CAS 13530-65-9)

Restrictions on use

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

4-Methyl-2-pentanone (CAS 108-10-1)
Ethanol (CAS 64-17-5)
Ethyl benzene (CAS 100-41-4)
Methanol (CAS 67-56-1)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)

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

Not listed.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding, as amended

Toluene (CAS 108-88-3)
Zinc chromate (CAS 13530-65-9)

Other EU regulations

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

1-Methoxy-2-propyl acetate (CAS 108-65-6)
4-Methyl-2-pentanone (CAS 108-10-1)
Ethanol (CAS 64-17-5)
Ethyl benzene (CAS 100-41-4)
Isobutyl alcohol (CAS 78-83-1)
Methanol (CAS 67-56-1)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended

1-Methoxy-2-propyl acetate (CAS 108-65-6)
4-Methyl-2-pentanone (CAS 108-10-1)
Ethanol (CAS 64-17-5)
Ethyl benzene (CAS 100-41-4)
Isobutyl alcohol (CAS 78-83-1)
Methanol (CAS 67-56-1)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

Directive 94/33/EC on the protection of young people at work, as amended

Ethyl benzene (CAS 100-41-4)
Methanol (CAS 67-56-1)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)

Other regulations	The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. Pregnant women should not work with the product, if there is the least risk of exposure.
National regulations	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. Follow national regulation for work with chemical agents.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations	Not available.
References	Not available.
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 or R-phrases and H-statements under Sections 2 to 15	R10 Flammable. R11 Highly flammable. R20 Harmful by inhalation. R20/21 Harmful by inhalation and in contact with skin. R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R34 Causes burns.
R36 Irritating to eyes.
R36/37 Irritating to eyes and respiratory system.
R37/38 Irritating to respiratory system and skin.
R38 Irritating to skin.
R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R41 Risk of serious damage to eyes.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63 Possible risk of harm to the unborn child.
R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.
R68 Possible risk of irreversible effects.
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.
H332 Harmful if inhaled.
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.
H411 Toxic to aquatic life with long lasting effects.

Revision information

None.

Training information

Follow training instructions when handling this material.

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