



# SAFETY DATA SHEET

**MATERION**

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

### 1.1. Product identifier

**Trade name or designation of the mixture** Boron nitride aerosol spray  
**Registration number** -  
**Document number** 1EF  
**Synonyms** None.  
**Materion Code** 1EF  
**Issue date** 12-April-2021  
**Version number** 01

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

**Company name** Materion Advanced Chemicals Inc.  
**Address** 407 N. 13th Street  
1316 W. St. Paul Avenue  
Milwaukee, WI 53233  
United States  
**Division** Milwaukee  
**Telephone** 414.212.0257  
**e-mail** advancedmaterials@materion.com  
**Contact person** Laura Hamilton

### 1.4. Emergency telephone number

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

**Identified uses** Not available.  
**Uses advised against** None known.

### 1.3. Details of the supplier of the safety data sheet

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**Address** 407 N. 13th Street  
1316 W. St. Paul Avenue  
Milwaukee, WI 53233  
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**Contact person** Laura Hamilton

### 1.4. Emergency telephone number

## 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

Aerosols Category 2 H223 - Flammable aerosol.

##### Health hazards

Serious eye damage/eye irritation Category 2 H319 - Causes serious eye irritation.

Germ cell mutagenicity Category 1B H340 - May cause genetic defects.

Carcinogenicity Category 1A H350 - May cause cancer.

Specific target organ toxicity - single exposure Category 3 narcotic effects

H336 - May cause drowsiness or dizziness.

Aspiration hazard

Category 1

H304 - May be fatal if swallowed and enters airways.

### Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard

Category 2

H411 - Toxic to aquatic life with long lasting effects.

### Hazard summary

Aerosol CONTENTS UNDER PRESSURE.

Pressurised container may explode when exposed to heat or flame. May be fatal if swallowed and enters airways. Toxic if inhaled. May cause drowsiness or dizziness. May cause cancer. Causes serious eye irritation. May cause genetic defects. Prolonged exposure may cause chronic effects. Dangerous for the environment if discharged into watercourses. Occupational exposure to the substance or mixture may cause adverse health effects. The material as sold in solid form is generally not considered hazardous. However, if the process involves grinding, melting, cutting or any other process that causes a release of dust or fumes, hazardous levels of airborne particulate could be generated.

## 2.2. Label elements

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

#### Contains:

acetone; propan-2-one; propanone, butane (containing  $\geq 0,1$  % butadiene (203-450-8)), ethanol; ethyl alcohol, ETHYLBENZENE, n-Butyl acetate, PROPANE, RM Boron nitride, XYLENE

#### Hazard pictograms



#### Signal word

Danger

#### Hazard statements

H223	Flammable aerosol.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
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.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurised container: Do not pierce or burn, even after use.
P261	Avoid breathing mist/vapours.
P261	Avoid breathing dust/fume/gas/vapours.
P264	Wash thoroughly after handling.
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/hearing protection.

#### Response

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P331	Do NOT induce vomiting.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P391	Collect spillage.

#### Storage

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

#### Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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**Supplemental label information**

52 % of the mixture consists of component(s) of unknown acute oral toxicity. 76 % of the mixture consists of component(s) of unknown acute dermal toxicity. 100 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 92 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. EUH066 - Repeated exposure may cause skin dryness or cracking.

For further information, please contact the Product Stewardship Department at +1.800.862.4118.

**2.3. Other hazards**

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

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
acetone; propan-2-one; propanone	30 - 35	67-64-1 200-662-2	-	606-001-00-8	#
<b>Classification:</b> Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336					
ethanol; ethyl alcohol	20 - 23	64-17-5 200-578-6	-	603-002-00-5	
<b>Classification:</b> Flam. Liq. 2;H225, Eye Irrit. 2;H319, Aquatic Chronic 2;H411					
RM Boron nitride	10 - 15	10043-11-5 233-136-6	-	-	
<b>Classification:</b> -					
PROPANE	10 - 13	74-98-6 200-827-9	-	601-003-00-5	
<b>Classification:</b> -					
butane (containing >= 0,1 % butadiene (203-450-8))	10 - 12	106-97-8 203-448-7	-	601-004-01-8	
<b>Classification:</b> Muta. 1B;H340, Carc. 1A;H350					
n-Butyl acetate	1 - 3	123-86-4 204-658-1	-	607-025-00-1	#
<b>Classification:</b> -					
XYLENE	1 - 2	1330-20-7 215-535-7	-	601-022-00-9	#
<b>Classification:</b> Flam. Liq. 3;H226, Acute Tox. 4;H312, Skin Irrit. 2;H315, Acute Tox. 4;H332, Aquatic Chronic 2;H411					
ETHYLBENZENE	≤ 1	100-41-4 202-849-4	-	601-023-00-4	#
<b>Classification:</b> Flam. Liq. 2;H225, Asp. Tox. 1;H304, Acute Tox. 4;H332, Carc. 2;H351, STOT RE 2;H373, Aquatic Chronic 2;H411					

**List of abbreviations and symbols that may be used above**

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

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

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

**Composition comments**

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

**SECTION 4: First aid measures****General information**

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.

**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**

Wash off with soap and water. Get medical attention if irritation develops and persists.

**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. If eye irritation persists: Get medical advice/attention.

**Ingestion**

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

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

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

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

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**SECTION 5: Firefighting measures****General fire hazards**

Flammable aerosol.

**5.1. Extinguishing media****Suitable extinguishing media**

Alcohol resistant foam. Powder. Carbon dioxide (CO<sub>2</sub>).

**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**

Contents under pressure. Pressurised container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

**5.3. Advice for firefighters****Special protective equipment for firefighters**

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Special firefighting procedures**

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapour pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

**Specific methods**

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

**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. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**For emergency responders**

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

**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**

Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Put material in suitable, covered, labeled containers.

**6.4. Reference to other sections**

For personal protection, see section 8. For waste disposal, see section 13.

## 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. Pressurised container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing mist/vapours. Avoid contact with eyes. Avoid prolonged exposure. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

### 7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in tightly closed container. 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
acetone; propan-2-one; propanone (CAS 67-64-1)	MAK	1200 mg/m <sup>3</sup>
		500 ppm
	STEL	4800 mg/m <sup>3</sup> 2000 ppm
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	Ceiling	3800 mg/m <sup>3</sup>
		1600 ppm
	MAK	1900 mg/m <sup>3</sup> 800 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	Ceiling	3800 mg/m <sup>3</sup>
		2000 ppm
	MAK	1900 mg/m <sup>3</sup> 1000 ppm
ETHYLBENZENE (CAS 100-41-4)	Ceiling	880 mg/m <sup>3</sup>
		200 ppm
	MAK	440 mg/m <sup>3</sup> 100 ppm
n-Butyl acetate (CAS 123-86-4)	Ceiling	480 mg/m <sup>3</sup>
		100 ppm
	MAK	480 mg/m <sup>3</sup> 100 ppm
PROPANE (CAS 74-98-6)	Ceiling	3600 mg/m <sup>3</sup> 2000 ppm
		1800 mg/m <sup>3</sup>
	MAK	1000 ppm
XYLENE (CAS 1330-20-7)	MAK	221 mg/m <sup>3</sup> 50 ppm
		442 mg/m <sup>3</sup>
	STEL	100 ppm

**Belgium. Exposure Limit Values**

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	2420 mg/m3
	TWA	1000 ppm 1210 mg/m3 500 ppm
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	STEL	2370 mg/m3
	TWA	980 ppm 1907 mg/m3
ETHYLBENZENE (CAS 100-41-4)	STEL	1000 ppm 551 mg/m3
	TWA	125 ppm 87 mg/m3 20 ppm
n-Butyl acetate (CAS 123-86-4)	STEL	712 mg/m3
	TWA	150 ppm 238 mg/m3 50 ppm
PROPANE (CAS 74-98-6) XYLENE (CAS 1330-20-7)	TWA	1000 ppm
	STEL	442 mg/m3 100 ppm 221 mg/m3 50 ppm

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	1400 mg/m3
	TWA	600 mg/m3
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	TWA	1800 mg/m3
	TWA	1000 mg/m3
ETHYLBENZENE (CAS 100-41-4)	STEL	545 mg/m3
	TWA	435 mg/m3
n-Butyl acetate (CAS 123-86-4)	STEL	950 mg/m3
	TWA	710 mg/m3
PROPANE (CAS 74-98-6) XYLENE (CAS 1330-20-7)	TWA	1800 mg/m3
	STEL	442 mg/m3 100 ppm 221 mg/m3 50 ppm

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	MAC	1210 mg/m3

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	MAC	500 ppm 1450 mg/m3
	STEL	10 ppm 1810 mg/m3
ethanol; ethyl alcohol (CAS 64-17-5)	MAC	750 ppm 1900 mg/m3
	STEL	1000 ppm 442 mg/m3
ETHYLBENZENE (CAS 100-41-4)	MAC	100 ppm 884 mg/m3
	STEL	200 ppm 724 mg/m3
n-Butyl acetate (CAS 123-86-4)	MAC	150 ppm 966 mg/m3
	STEL	200 ppm 221 mg/m3
XYLENE (CAS 1330-20-7)	MAC	50 ppm 442 mg/m3
	STEL	100 ppm

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
n-Butyl acetate (CAS 123-86-4)	TWA	710 mg/m3
		150 ppm

**Czech Republic. OELs. Government Decree 361**

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	Ceiling	1500 mg/m3
	TWA	800 mg/m3
ethanol; ethyl alcohol (CAS 64-17-5)	Ceiling	3000 mg/m3
	TWA	1000 mg/m3
ETHYLBENZENE (CAS 100-41-4)	Ceiling	500 mg/m3
	TWA	200 mg/m3
n-Butyl acetate (CAS 123-86-4)	Ceiling	1200 mg/m3
	TWA	950 mg/m3
XYLENE (CAS 1330-20-7)	Ceiling	400 mg/m3
	TWA	200 mg/m3

**Denmark. Exposure Limit Values**

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	TLV	600 mg/m3
		250 ppm

**Denmark. Exposure Limit Values Components**

<b>Components</b>	<b>Type</b>	<b>Value</b>
butane (containing $\geq 0,1$ % butadiene (203-450-8)) (CAS 106-97-8)	TLV	1200 mg/m <sup>3</sup>
		500 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	TLV	1900 mg/m <sup>3</sup>
		1000 ppm
ETHYLBENZENE (CAS 100-41-4)	TLV	217 mg/m <sup>3</sup>
		50 ppm
n-Butyl acetate (CAS 123-86-4)	TLV	710 mg/m <sup>3</sup>
		150 ppm
PROPANE (CAS 74-98-6)	TLV	1800 mg/m <sup>3</sup>
		1000 ppm
XYLENE (CAS 1330-20-7)	TLV	109 mg/m <sup>3</sup>
		25 ppm

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m <sup>3</sup>
		500 ppm
butane (containing $\geq 0,1$ % butadiene (203-450-8)) (CAS 106-97-8)	TWA	1500 mg/m <sup>3</sup>
		800 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	1900 mg/m <sup>3</sup>
		1000 ppm
	TWA	1000 mg/m <sup>3</sup>
		500 ppm
ETHYLBENZENE (CAS 100-41-4)	STEL	884 mg/m <sup>3</sup>
		200 ppm
	TWA	442 mg/m <sup>3</sup>
		100 ppm
n-Butyl acetate (CAS 123-86-4)	STEL	700 mg/m <sup>3</sup>
		150 ppm
	TWA	500 mg/m <sup>3</sup>
		100 ppm
PROPANE (CAS 74-98-6)	TWA	1800 mg/m <sup>3</sup>
		1000 ppm
XYLENE (CAS 1330-20-7)	STEL	450 mg/m <sup>3</sup>
		100 ppm
	TWA	200 mg/m <sup>3</sup>
		50 ppm

**Finland. Workplace Exposure Limits Components**

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	1500 mg/m <sup>3</sup>
		630 ppm



**Finland. Workplace Exposure Limits Components**

Components	Type	Value
	TWA	1200 mg/m3 500 ppm
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	STEL	2400 mg/m3
	TWA	1000 ppm 1900 mg/m3 800 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	2500 mg/m3
	TWA	1300 ppm 1900 mg/m3 1000 ppm
ETHYLBENZENE (CAS 100-41-4)	STEL	880 mg/m3
	TWA	200 ppm 220 mg/m3 50 ppm
n-Butyl acetate (CAS 123-86-4)	STEL	960 mg/m3
	TWA	200 ppm 720 mg/m3 150 ppm
PROPANE (CAS 74-98-6)	STEL	2000 mg/m3 1100 ppm
	TWA	1500 mg/m3 800 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**

Components	Type	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	VLE	2420 mg/m3
<b>Regulatory status:</b> Regulatory binding (VRC)		1000 ppm
<b>Regulatory status:</b> Regulatory binding (VRC)	VME	1210 mg/m3
<b>Regulatory status:</b> Regulatory binding (VRC)		500 ppm
<b>Regulatory status:</b> Regulatory binding (VRC)	VME	1900 mg/m3
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	VME	1900 mg/m3
<b>Regulatory status:</b> Indicative limit (VL)		800 ppm
<b>Regulatory status:</b> Indicative limit (VL)		800 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	VLE	9500 mg/m3
<b>Regulatory status:</b> Indicative limit (VL)		5000 ppm
<b>Regulatory status:</b> Indicative limit (VL)		5000 ppm

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

Components	Type	Value
	VME	1900 mg/m3
<b>Regulatory status:</b>	Indicative limit (VL)	
		1000 ppm
<b>Regulatory status:</b>	Indicative limit (VL)	
ETHYLBENZENE (CAS 100-41-4)	VLE	442 mg/m3
<b>Regulatory status:</b>	Regulatory binding (VRC)	
		100 ppm
<b>Regulatory status:</b>	Regulatory binding (VRC)	
	VME	88,4 mg/m3
<b>Regulatory status:</b>	Regulatory binding (VRC)	
		20 ppm
<b>Regulatory status:</b>	Regulatory binding (VRC)	
n-Butyl acetate (CAS 123-86-4)	VLE	940 mg/m3
<b>Regulatory status:</b>	Indicative limit (VL)	
		200 ppm
<b>Regulatory status:</b>	Indicative limit (VL)	
	VME	710 mg/m3
<b>Regulatory status:</b>	Indicative limit (VL)	
		150 ppm
<b>Regulatory status:</b>	Indicative limit (VL)	
XYLENE (CAS 1330-20-7)	VLE	442 mg/m3
<b>Regulatory status:</b>	Regulatory binding (VRC)	
		100 ppm
<b>Regulatory status:</b>	Regulatory binding (VRC)	
	VME	221 mg/m3
<b>Regulatory status:</b>	Regulatory binding (VRC)	
		50 ppm
<b>Regulatory status:</b>	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
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1200 mg/m3
		500 ppm
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	TWA	2400 mg/m3
		1000 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	380 mg/m3
		200 ppm
ETHYLBENZENE (CAS 100-41-4)	TWA	88 mg/m3
		20 ppm
n-Butyl acetate (CAS 123-86-4)	TWA	480 mg/m3
		100 ppm
PROPANE (CAS 74-98-6)	TWA	1800 mg/m3
		1000 ppm
XYLENE (CAS 1330-20-7)	TWA	220 mg/m3
		100 ppm

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	AGW	1200 mg/m3
		500 ppm
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	AGW	2400 mg/m3
		1000 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	AGW	380 mg/m3
		200 ppm
ETHYLBENZENE (CAS 100-41-4)	AGW	88 mg/m3
		20 ppm
n-Butyl acetate (CAS 123-86-4)	AGW	300 mg/m3
		62 ppm
PROPANE (CAS 74-98-6)	AGW	1800 mg/m3
		1000 ppm
XYLENE (CAS 1330-20-7)	AGW	440 mg/m3
		100 ppm

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	3560 mg/m3
	TWA	1780 mg/m3
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	TWA	2350 mg/m3
		1000 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1900 mg/m3
		1000 ppm
ETHYLBENZENE (CAS 100-41-4)	STEL	545 mg/m3
	TWA	125 ppm 435 mg/m3 100 ppm
n-Butyl acetate (CAS 123-86-4)	STEL	950 mg/m3
	TWA	200 ppm 710 mg/m3 150 ppm
PROPANE (CAS 74-98-6)	TWA	1800 mg/m3
		1000 ppm
XYLENE (CAS 1330-20-7)	STEL	650 mg/m3
	TWA	150 ppm 435 mg/m3 100 ppm

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces**

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces**

<b>Components</b>	<b>Type</b>	<b>Value</b>
butane (containing $\geq 0,1$ % butadiene (203-450-8)) (CAS 106-97-8)	STEL	9400 mg/m <sup>3</sup>
	TWA	2350 mg/m <sup>3</sup>
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	7600 mg/m <sup>3</sup>
	TWA	1900 mg/m <sup>3</sup>
ETHYLBENZENE (CAS 100-41-4)	STEL	884 mg/m <sup>3</sup>
	TWA	442 mg/m <sup>3</sup>
n-Butyl acetate (CAS 123-86-4)	STEL	950 mg/m <sup>3</sup>
	TWA	950 mg/m <sup>3</sup>
XYLENE (CAS 1330-20-7)	STEL	442 mg/m <sup>3</sup>
	TWA	221 mg/m <sup>3</sup>

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	600 mg/m <sup>3</sup>
		250 ppm
butane (containing $\geq 0,1$ % butadiene (203-450-8)) (CAS 106-97-8)	TWA	1200 mg/m <sup>3</sup>
		500 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup>
		1000 ppm
ETHYLBENZENE (CAS 100-41-4)	STEL	884 mg/m <sup>3</sup>
	TWA	200 ppm 200 mg/m <sup>3</sup> 50 ppm
n-Butyl acetate (CAS 123-86-4)	TWA	700 mg/m <sup>3</sup>
		150 ppm
PROPANE (CAS 74-98-6)	TWA	1800 mg/m <sup>3</sup>
		1000 ppm
XYLENE (CAS 1330-20-7)	STEL	442 mg/m <sup>3</sup> 100 ppm
	TWA	109 mg/m <sup>3</sup> 25 ppm

**Ireland. Occupational Exposure Limits**

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m <sup>3</sup>
		500 ppm
butane (containing $\geq 0,1$ % butadiene (203-450-8)) (CAS 106-97-8)	TWA	1000 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	1000 ppm
ETHYLBENZENE (CAS 100-41-4)	STEL	884 mg/m <sup>3</sup>
		200 ppm

**Ireland. Occupational Exposure Limits**

<b>Components</b>	<b>Type</b>	<b>Value</b>
	TWA	442 mg/m3
		100 ppm
n-Butyl acetate (CAS 123-86-4)	STEL	950 mg/m3
		200 ppm
	TWA	710 mg/m3
		150 ppm
XYLENE (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Italy. Occupational Exposure Limits**

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	STEL	1000 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	1000 ppm
ETHYLBENZENE (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
n-Butyl acetate (CAS 123-86-4)	STEL	723 mg/m3
		150 ppm
	TWA	241 mg/m3
		50 ppm
XYLENE (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	STEL	300 mg/m3
	TWA	300 mg/m3
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1000 mg/m3
ETHYLBENZENE (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
n-Butyl acetate (CAS 123-86-4)	TWA	200 mg/m3

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
PROPANE (CAS 74-98-6)	STEL	300 mg/m3
	TWA	1800 mg/m3 1000 ppm
RM Boron nitride (CAS 10043-11-5)	TWA	6 mg/m3
XYLENE (CAS 1330-20-7)	STEL	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	2420 mg/m3 1000 ppm
	TWA	1210 mg/m3 500 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	1900 mg/m3 1000 ppm
	TWA	1000 mg/m3 500 ppm
ETHYLBENZENE (CAS 100-41-4)	STEL	884 mg/m3 200 ppm
	TWA	442 mg/m3 100 ppm
n-Butyl acetate (CAS 123-86-4)	STEL	700 mg/m3 150 ppm
	TWA	500 mg/m3 100 ppm
RM Boron nitride (CAS 10043-11-5)	TWA	6 mg/m3
XYLENE (CAS 1330-20-7)	STEL	442 mg/m3 100 ppm
	TWA	221 mg/m3 50 ppm

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3 500 ppm
	STEL	884 mg/m3 200 ppm
ETHYLBENZENE (CAS 100-41-4)	TWA	442 mg/m3 100 ppm
	STEL	442 mg/m3 100 ppm
XYLENE (CAS 1330-20-7)	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)**

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m <sup>3</sup>
		500 ppm
ETHYLBENZENE (CAS 100-41-4)	STEL	884 mg/m <sup>3</sup>
		200 ppm
XYLENE (CAS 1330-20-7)	TWA	442 mg/m <sup>3</sup>
		100 ppm
	STEL	442 mg/m <sup>3</sup>
		100 ppm
	TWA	221 mg/m <sup>3</sup>
		50 ppm

**Netherlands. OELs (binding)  
Components**

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	2420 mg/m <sup>3</sup>
	TWA	1210 mg/m <sup>3</sup>
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	1900 mg/m <sup>3</sup>
	TWA	260 mg/m <sup>3</sup>
ETHYLBENZENE (CAS 100-41-4)	STEL	430 mg/m <sup>3</sup>
	TWA	215 mg/m <sup>3</sup>
XYLENE (CAS 1330-20-7)	STEL	442 mg/m <sup>3</sup>
	TWA	210 mg/m <sup>3</sup>

**Norway. Administrative Norms for Contaminants in the Workplace  
Components**

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	TLV	295 mg/m <sup>3</sup>
		125 ppm
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	TLV	600 mg/m <sup>3</sup>
		250 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	TLV	950 mg/m <sup>3</sup>
		500 ppm
ETHYLBENZENE (CAS 100-41-4)	TLV	20 mg/m <sup>3</sup>
		5 ppm
n-Butyl acetate (CAS 123-86-4)	TLV	355 mg/m <sup>3</sup>
		75 ppm
PROPANE (CAS 74-98-6)	TLV	900 mg/m <sup>3</sup>
		500 ppm
XYLENE (CAS 1330-20-7)	TLV	108 mg/m <sup>3</sup>
		25 ppm

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	1800 mg/m <sup>3</sup>

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

Components	Type	Value
	TWA	600 mg/m <sup>3</sup>
butane (containing ≥ 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	STEL	3000 mg/m <sup>3</sup>
	TWA	1900 mg/m <sup>3</sup>
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup>
ETHYLBENZENE (CAS 100-41-4)	STEL	400 mg/m <sup>3</sup>
	TWA	200 mg/m <sup>3</sup>
n-Butyl acetate (CAS 123-86-4)	STEL	720 mg/m <sup>3</sup>
	TWA	240 mg/m <sup>3</sup>
PROPANE (CAS 74-98-6)	TWA	1800 mg/m <sup>3</sup>
XYLENE (CAS 1330-20-7)	STEL	200 mg/m <sup>3</sup>
	TWA	100 mg/m <sup>3</sup>

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

Components	Type	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m <sup>3</sup>
		500 ppm
ETHYLBENZENE (CAS 100-41-4)	STEL	884 mg/m <sup>3</sup>
		200 ppm
	TWA	442 mg/m <sup>3</sup>
		100 ppm
XYLENE (CAS 1330-20-7)	STEL	442 mg/m <sup>3</sup>
		100 ppm
	TWA	221 mg/m <sup>3</sup>
		50 ppm

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

Components	Type	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	750 ppm
	TWA	500 ppm
butane (containing ≥ 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	STEL	1000 ppm
	TWA	1000 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1000 ppm
ETHYLBENZENE (CAS 100-41-4)	TWA	20 ppm
n-Butyl acetate (CAS 123-86-4)	STEL	200 ppm
	TWA	150 ppm
PROPANE (CAS 74-98-6)	TWA	2500 ppm
XYLENE (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

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

Components	Type	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m <sup>3</sup>



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

<b>Components</b>	<b>Type</b>	<b>Value</b>
		500 ppm
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	STEL	1500 mg/m3
	TWA	1200 mg/m3
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	9500 mg/m3
	TWA	5000 ppm
		1900 mg/m3
ETHYLBENZENE (CAS 100-41-4)	STEL	1000 ppm
		884 mg/m3
	TWA	200 ppm
		442 mg/m3
n-Butyl acetate (CAS 123-86-4)	STEL	100 ppm
		950 mg/m3
	TWA	200 ppm
		715 mg/m3
PROPANE (CAS 74-98-6)	STEL	150 ppm
		1800 mg/m3
	TWA	1000 ppm
		1400 mg/m3
		778 ppm
XYLENE (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Slovakia. OELs for carcinogens and mutagens. Regulation No. 46/2002 on carcinogenic and mutagenic substances**

<b>Components</b>	<b>Type</b>	<b>Value</b>
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	TWA	2400 mg/m3
		1000 ppm

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

<b>Components</b>	<b>Type</b>	<b>Value</b>
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	1920 mg/m3
	TWA	1000 ppm
		960 mg/m3
ETHYLBENZENE (CAS 100-41-4)	STEL	500 ppm
		884 mg/m3
	TWA	200 ppm
		442 mg/m3
n-Butyl acetate (CAS 123-86-4)	STEL	100 ppm
		700 mg/m3
	TWA	150 ppm
		500 mg/m3

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

Components	Type	Value
XYLENE (CAS 1330-20-7)	STEL	100 ppm
		442 mg/m <sup>3</sup>
	TWA	100 ppm
		221 mg/m <sup>3</sup>
		50 ppm

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

Components	Type	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m <sup>3</sup>
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	TWA	500 ppm
		2400 mg/m <sup>3</sup>
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1000 ppm
		960 mg/m <sup>3</sup>
ETHYLBENZENE (CAS 100-41-4)	TWA	500 ppm
		442 mg/m <sup>3</sup>
n-Butyl acetate (CAS 123-86-4)	TWA	100 ppm
		300 mg/m <sup>3</sup>
PROPANE (CAS 74-98-6)	TWA	62 ppm
		1800 mg/m <sup>3</sup>
XYLENE (CAS 1330-20-7)	TWA	1000 ppm
		221 mg/m <sup>3</sup>
		50 ppm

**Spain. Occupational Exposure Limits**

Components	Type	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m <sup>3</sup>
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	TWA	500 ppm
		1000 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	1910 mg/m <sup>3</sup>
		1000 ppm
ETHYLBENZENE (CAS 100-41-4)	STEL	884 mg/m <sup>3</sup>
		200 ppm
n-Butyl acetate (CAS 123-86-4)	TWA	441 mg/m <sup>3</sup>
		100 ppm
		965 mg/m <sup>3</sup>
PROPANE (CAS 74-98-6)	TWA	200 ppm
		724 mg/m <sup>3</sup>
XYLENE (CAS 1330-20-7)	STEL	150 ppm
		1000 ppm
		442 mg/m <sup>3</sup>
	TWA	100 ppm
		221 mg/m <sup>3</sup>

**Spain. Occupational Exposure Limits Components****Type****Value**

50 ppm

**Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)****Components****Type****Value**acetone; propan-2-one;  
propanone (CAS 67-64-1)

STEL

1200 mg/m3

TWA

500 ppm

600 mg/m3

250 ppm

ethanol; ethyl alcohol (CAS  
64-17-5)

STEL

1900 mg/m3

TWA

1000 ppm

1000 mg/m3

500 ppm

ETHYLBENZENE (CAS  
100-41-4)

Ceiling

884 mg/m3

TWA

200 ppm

220 mg/m3

n-Butyl acetate (CAS  
123-86-4)

STEL

50 ppm

700 mg/m3

TWA

150 ppm

500 mg/m3

XYLENE (CAS 1330-20-7)

Ceiling

100 ppm

442 mg/m3

TWA

100 ppm

221 mg/m3

50 ppm

**Switzerland. SUVA Grenzwerte am Arbeitsplatz****Components****Type****Value**acetone; propan-2-one;  
propanone (CAS 67-64-1)

STEL

2400 mg/m3

TWA

1000 ppm

1200 mg/m3

500 ppm

butane (containing  $\geq 0,1$   
% butadiene (203-450-8))  
(CAS 106-97-8)

STEL

7600 mg/m3

TWA

3200 ppm

1900 mg/m3

800 ppm

ethanol; ethyl alcohol (CAS  
64-17-5)

STEL

1920 mg/m3

TWA

1000 ppm

960 mg/m3

500 ppm

ETHYLBENZENE (CAS  
100-41-4)

STEL

220 mg/m3

TWA

50 ppm

220 mg/m3

50 ppm

n-Butyl acetate (CAS  
123-86-4)

STEL

960 mg/m3

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

Components	Type	Value
		200 ppm
	TWA	480 mg/m3
		100 ppm
PROPANE (CAS 74-98-6)	STEL	7200 mg/m3
		4000 ppm
	TWA	1800 mg/m3
		1000 ppm
XYLENE (CAS 1330-20-7)	STEL	870 mg/m3
		200 ppm
	TWA	435 mg/m3
		100 ppm

**UK. EH40 Workplace Exposure Limits (WELs)**

Components	Type	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	STEL	3620 mg/m3
		1500 ppm
	TWA	1210 mg/m3
		500 ppm
butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	STEL	1810 mg/m3
		750 ppm
	TWA	1450 mg/m3
		600 ppm
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1920 mg/m3
		1000 ppm
ETHYLBENZENE (CAS 100-41-4)	STEL	552 mg/m3
		125 ppm
	TWA	441 mg/m3
		100 ppm
n-Butyl acetate (CAS 123-86-4)	STEL	966 mg/m3
		200 ppm
	TWA	724 mg/m3
		150 ppm
XYLENE (CAS 1330-20-7)	STEL	441 mg/m3
		100 ppm
	TWA	220 mg/m3
		50 ppm

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

Components	Type	Value
acetone; propan-2-one; propanone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
ETHYLBENZENE (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 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
n-Butyl acetate (CAS 123-86-4)	STEL	723 mg/m <sup>3</sup>
		150 ppm
	TWA	241 mg/m <sup>3</sup>
XYLENE (CAS 1330-20-7)		50 ppm
	STEL	442 mg/m <sup>3</sup>
		100 ppm
	TWA	221 mg/m <sup>3</sup>
		50 ppm

**Biological limit values**

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

Components	Value	Determinant	Specimen	Sampling Time
acetone; propan-2-one; propanone (CAS 67-64-1)	20 mg/g	Acetone	Creatinine in urine	*
	20 mg/l	Acetone	Blood	*
	0,34 mmol/l	Acetone	Blood	*
	39 mmol/mol	Acetone	Creatinine in urine	*
ETHYLBENZENE (CAS 100-41-4)	1,5 g/g	Mandelic acid	Creatinine in urine	*
	1,5 mg/l	Ethylbenzene	Blood	*
	1,12 mol/mol	Mandelic acid	Creatinine in urine	*
	14,1 umol/l	Ethylbenzene	Blood	*
XYLENE (CAS 1330-20-7)	1,5 g/g	Methylhippuric acids	Creatinine in urine	*
	1,5 mg/l	Xylene	Blood	*
	0,88 mol/mol	Methylhippuric acids	Creatinine in urine	*
	14,13 umol/l	Xylene	Blood	*

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

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

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

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

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

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

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

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

Components	Value	Determinant	Specimen	Sampling Time
acetone; propan-2-one; propanone (CAS 67-64-1)	100 mg/l	Acétone	Urine	*
ETHYLBENZENE (CAS 100-41-4)	1500 mg/g	Acide mandélique	Creatinine in urine	*
XYLENE (CAS 1330-20-7)	1500 mg/g	Acides méthylhippuriques	Creatinine in urine	*

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

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

Components	Value	Determinant	Specimen	Sampling Time
acetone; propan-2-one; propanone (CAS 67-64-1)	80 mg/l	ACETON	Urine	*
ETHYLBENZENE (CAS 100-41-4)	250 mg/g	Mandelsäure plus Phenylglyoxylsäure	Creatinine in urine	*
XYLENE (CAS 1330-20-7)	2000 mg/l	Methylhippur-(Tolur-) säure (alle Isomere)	Urine	*

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

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

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

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

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

Components	Value	Determinant	Specimen	Sampling Time
acetone; propan-2-one; propanone (CAS 67-64-1)	53,36 mg/g	Acetone	Creatinine in urine	*
	80 mg/l	Acetone	Urine	*
ETHYLBENZENE (CAS 100-41-4)	8,03 mg/g	2-ethylphenol	Creatinine in urine	*
	12 mg/l	2-ethylphenol	Urine	*
XYLENE (CAS 1330-20-7)	1334 mg/g	Methylhippuric acids	Creatinine in urine	*
	2000 mg/l	Methylhippuric acids	Urine	*
	1,5 mg/l	Xylene	Blood	*

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

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

Components	Value	Determinant	Specimen	Sampling Time
acetone; propan-2-one; propanone (CAS 67-64-1)	50 mg/l	Acetona	Urine	*
ETHYLBENZENE (CAS 100-41-4)	700 mg/g	Suma del ácido mandélico y el ácido fenilglioxílico	Creatinine in urine	*

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

Components	Value	Determinant	Specimen	Sampling Time
XYLENE (CAS 1330-20-7)	1 g/g	Ácidos metilhipúricos	Creatinine in urine	*

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

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

Components	Value	Determinant	Specimen	Sampling Time
acetone; propan-2-one; propanone (CAS 67-64-1)	80 mg/l	ACETON	Urine	*
ETHYLBENZENE (CAS 100-41-4)	600 mg/g	Mandelsäure plus Phenylglyoxylsäure	Creatinine in urine	*
XYLENE (CAS 1330-20-7)	2 g/l	Methyl-Hippursäure	Urine	*

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

**UK. EH40 Biological Monitoring Guidance Values (BMGVs)**

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

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

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no effect levels (DNELs)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

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

ETHYLBENZENE (CAS 100-41-4) Can be absorbed through the skin.  
XYLENE (CAS 1330-20-7) Can be absorbed through the skin.

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

ETHYLBENZENE (CAS 100-41-4) Can be absorbed through the skin.  
XYLENE (CAS 1330-20-7) Can be absorbed through the skin.

**8.2. Exposure controls**

**Appropriate engineering controls** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

**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** Chemical respirator with organic vapour cartridge and full facepiece.

**Skin protection**

**- Hand protection** Wear appropriate chemical resistant gloves.

**- Other** Wear suitable protective clothing. Use of an impervious apron is recommended.

**Respiratory protection** Chemical respirator with organic vapour cartridge and full facepiece.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures** Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

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

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Aerosol
<b>Colour</b>	Not available.
<b>Odour</b>	Not available.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-187,6 °C (-305,68 °F) estimated
<b>Initial boiling point and boiling range</b>	-0,5 °C (31,1 °F) estimated
<b>Flash point</b>	-104,4 °C (-156,0 °F) estimated
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	1,2 % estimated
<b>Flammability limit - upper (%)</b>	12,8 % estimated
<b>Vapour pressure</b>	2109,41 hPa estimated
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	287 °C (548,6 °F) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not explosive.
<b>Oxidising properties</b>	Not oxidising.

### 9.2. Other information

<b>Density</b>	0,72 g/cm <sup>3</sup> estimated
<b>Heat of combustion (NFPA 30B)</b>	34,38 kJ/g estimated
<b>Percent volatile</b>	68 % estimated
<b>Specific gravity</b>	0,72 estimated
<b>VOC</b>	68 % estimated

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Avoid temperatures exceeding the decomposition temperature. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Strong acids. Acids. Strong oxidising agents. Nitrates. Halogens. Fluorine. Chlorine.
<b>10.6. Hazardous decomposition products</b>	No dangerous reaction known under conditions of normal use.

## SECTION 11: Toxicological information

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

### Information on likely routes of exposure

<b>Inhalation</b>	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
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<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
<b>Symptoms</b>	Aspiration may cause pulmonary oedema and pneumonitis. May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

### 11.1. Information on toxicological effects

**Acute toxicity** May be fatal if swallowed and enters airways.

Product	Species	Test Results
Boron nitride aerosol spray		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	57140 mg/kg
<b>Inhalation</b>		
LC50	Rat	143 mg/l, 8 Hours
<b>Oral</b>		
LD50	Rat	15150 mg/kg
<b>Components</b>		
acetone; propan-2-one; propanone (CAS 67-64-1)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	20000 mg/kg
<b>Inhalation</b>		
LC50	Rat	50,1 mg/l, 8 Hours
<b>Oral</b>		
LD50	Rat	5800 mg/kg
ethanol; ethyl alcohol (CAS 64-17-5)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Mouse	39 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	6,2 g/kg
ETHYLBENZENE (CAS 100-41-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	17800 mg/kg
<b>Oral</b>		
LD50	Rat	3500 mg/kg
n-Butyl acetate (CAS 123-86-4)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Wistar rat	160 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	14000 mg/kg
XYLENE (CAS 1330-20-7)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	3523 - 8600 mg/kg

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

**Skin corrosion/irritation** Due to partial or complete lack of data the classification is not possible.

<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory sensitisation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Skin sensitisation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Germ cell mutagenicity</b>	May cause genetic defects.

**Slovenia. CMR. Protection of workers from exposure to carcinogen and mutagen agents (ULRS 101/2005, as amended)**

butane (containing  $\geq 0,1$  % butadiene (203-450-8)) (CAS 106-97-8) Mutagenic, Category 1B.

**Carcinogenicity** May cause cancer.

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

butane (containing  $\geq 0,1$  % butadiene (203-450-8)) (CAS 106-97-8)

**IARC Monographs. Overall Evaluation of Carcinogenicity**

ETHYLBENZENE (CAS 100-41-4) 2B Possibly carcinogenic to humans.  
 XYLENE (CAS 1330-20-7) 3 Not classifiable as to carcinogenicity to humans.

**Slovenia. CMR. Protection of workers from exposure to carcinogen and mutagen agents (ULRS 101/2005, as amended)**

butane (containing  $\geq 0,1$  % butadiene (203-450-8)) (CAS 106-97-8) Carcinogenic, Category 1A

<b>Reproductive toxicity</b>	Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals.
<b>Specific target organ toxicity - single exposure</b>	May cause drowsiness or dizziness.
<b>Specific target organ toxicity - repeated exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.
<b>Mixture versus substance information</b>	No information available.
<b>Other information</b>	Not available.

**SECTION 12: Ecological information**

**12.1. Toxicity** Toxic to aquatic life with long lasting effects. Based on available data, the classification criteria are not met for hazardous to the aquatic environment, acute hazard.

Product	Species		Test Results
Boron nitride aerosol spray			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Daphnia	17773,6973 mg/l, 48 hours
Fish	LC50	Fish	2007,5259 mg/l, 96 hours
<i>Chronic</i>			
Crustacea	EC50	Daphnia	28,8927 mg/l, 48 hours estimated
Fish	LC50	Fish	116,3048 mg/l, 96 hours estimated
Components	Species		Test Results
acetone; propan-2-one; propanone (CAS 67-64-1)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	10294 - 17704 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours
ethanol; ethyl alcohol (CAS 64-17-5)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	7,7 - 11,2 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	42 mg/l, 4 days

Components	Species	Test Results
ETHYLBENZENE (CAS 100-41-4)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna) 1,37 - 4,4 mg/l, 48 hours
Fish	LC50	Atlantic silverside (Menidia menidia) 4,4 - 5,7 mg/l, 96 hours
n-Butyl acetate (CAS 123-86-4)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow (Pimephales promelas) 17 - 19 mg/l, 96 hours
XYLENE (CAS 1330-20-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 6,702 - 10,032 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)**

acetone; propan-2-one; propanone	-0,24
butane (containing >= 0,1 % butadiene (203-450-8))	2,89
ethanol; ethyl alcohol	-0,31
ETHYLBENZENE	3,15
n-Butyl acetate	1,78
PROPANE	2,36

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** No data available.

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

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

**Substance Global Warming Potential per (Annex IV), Regulation 517/2014/EU on fluorinated greenhouse gases, as amended**

butane (containing >= 0,1 % butadiene (203-450-8)) (CAS 106-97-8)	4
PROPANE (CAS 74-98-6)	3

**12.7. Additional information**

**Estonia Dangerous substances in soil Data**

ethanol; ethyl alcohol (CAS 64-17-5)	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
ETHYLBENZENE (CAS 100-41-4)	ETHYLBENZENE 0,1 mg/kg ETHYLBENZENE 5 mg/kg ETHYLBENZENE 50 mg/kg
RM Boron nitride (CAS 10043-11-5)	Boron (B) 100 mg/kg Boron (B) 30 mg/kg Boron (B) 500 mg/kg
XYLENE (CAS 1330-20-7)	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

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	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).
<b>Contaminated packaging</b>	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.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. 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. Do not incinerate. Make sure containers are empty before discarding (explosion risk). Empty cans completely and then puncture it with approved device made for this purpose. The aerosol canister may them be disposed of in normal trash removal.
<b>Special precautions</b>	Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

<b>14.1. UN number</b>	UN1011
<b>14.2. UN proper shipping name</b>	BUTANE
<b>14.3. Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	2.1
<b>Hazard No. (ADR)</b>	23
<b>Tunnel restriction code</b>	B/D
<b>14.4. Packing group</b>	Not available.
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### RID

<b>14.1. UN number</b>	UN1011
<b>14.2. UN proper shipping name</b>	BUTANE
<b>14.3. Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	2.1 (+13)
<b>14.4. Packing group</b>	Not available.
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### ADN

<b>14.1. UN number</b>	UN1011
<b>14.2. UN proper shipping name</b>	BUTANE
<b>14.3. Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	2.1
<b>14.4. Packing group</b>	Not available.
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### IATA

<b>14.1. UN number</b>	UN1011
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**14.2. UN proper shipping name** Butane

**14.3. Transport hazard class(es)**

**Class** 2.1

**Subsidiary risk** -

**14.4. Packing group** Not available.

**14.5. Environmental hazards** No.

**ERG Code** 10L

**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Other information**

**Passenger and cargo aircraft** Forbidden

**Cargo aircraft only** Allowed with restrictions.

#### IMDG

**14.1. UN number** UN1011

**14.2. UN proper shipping name** BUTANE

**14.3. Transport hazard class(es)**

**Class** 2.1

**Subsidiary risk** -

**14.4. Packing group** Not available.

**14.5. Environmental hazards**

**Marine pollutant** No.

**EmS** F-D, S-U

**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**ADN; ADR; IATA; IMDG; RID**



**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 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**

acetone; propan-2-one; propanone (CAS 67-64-1)

ETHYLBENZENE (CAS 100-41-4)

XYLENE (CAS 1330-20-7)

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

Not listed.

#### Authorisations

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

acetone; propan-2-one; propanone (CAS 67-64-1)

ethanol; ethyl alcohol (CAS 64-17-5)

ETHYLBENZENE (CAS 100-41-4)

butane (containing  $\geq 0,1$  % butadiene (203-450-8)) (CAS 106-97-8)

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

butane (containing  $\geq 0,1$  % butadiene (203-450-8)) (CAS 106-97-8)

#### Other EU regulations

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

acetone; propan-2-one; propanone (CAS 67-64-1)

butane (containing  $\geq 0,1$  % butadiene (203-450-8)) (CAS 106-97-8)

ethanol; ethyl alcohol (CAS 64-17-5)

ETHYLBENZENE (CAS 100-41-4)

n-Butyl acetate (CAS 123-86-4)

PROPANE (CAS 74-98-6)

XYLENE (CAS 1330-20-7)

#### Other regulations

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

#### National regulations

Follow national regulation for work with chemical agents. According to Directive 92/85/EEC as amended, pregnant women should not work with the product, if there is the least risk of exposure.

Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC, as amended.

#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

#### List of abbreviations

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

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

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).

CAS: Chemical Abstract Service.

CEN: European Committee for Standardization.

IATA: International Air Transport Association.

IBC: Intermediate Bulk Container.

IMDG: International Maritime Dangerous Goods.

MAC: Maximum Allowed Concentration.

MARPOL: International Convention for the Prevention of Pollution from Ships.

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 Weighted Average.

VLE: Exposure Limit Value.

VME: Exposure Average Value.

vPvB: Very persistent and very bioaccumulative.

#### 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 calculator methods and test data, if available.

#### Revision information

This document has undergone significant changes and should be reviewed in its entirety.

**Training information****Disclaimer**

Follow training instructions when handling this material.

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