

# Custom Volatile Mix

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 25/05/2018

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Version: 1.0

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Custom Volatile Mix  
Product code : AL0-130324  
Product group : Trade product

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

##### 1.2.1. Relevant identified uses

Main use category : Laboratory Use  
Industrial/Professional use spec : Industrial  
For professional use only  
Use of the substance/mixture : Certified reference material for laboratory use only

##### 1.2.2. Uses advised against

No additional information available

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

Phenova  
6390 Joyce Dr. Suite 100  
80403 Golden, CO - United States  
T 1-866-942-2978 - F 1-866-283-0269  
[info@phenova.com](mailto:info@phenova.com) - [www.phenova.com](http://www.phenova.com)

#### 1.4. Emergency telephone number

Emergency number : ChemTel Assistance (US/Canada) 1-800-255-3924  
ChemTel Assistance (International) +1 813-248-0585

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 : H225  
STOT SE 3 : H336  
Aquatic Chronic 2 : H411

##### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F+; R12  
N; R51/53  
R66  
R67

Full text of R-phrases: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

GHS09

Signal word (CLP) : Danger  
Hazardous ingredients : n-pentane  
Hazard statements (CLP) : H225 - Highly flammable liquid and vapor  
H336 - May cause drowsiness or dizziness

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Precautionary statements (CLP)	H411 - Toxic to aquatic life with long lasting effects : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P233 - Keep container tightly closed P261 - Avoid breathing dust/fume/gas/mist/vapors/spray 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 P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P308+P313 - IF exposed or concerned: Get medical advice/attention P370+P378 - In case of fire: Use media other than water to extinguish P391 - Collect spillage P403+P233 - Store in a well-ventilated place. Keep container tightly closed P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation
EUH phrases	: EUH208 - Contains methacrylonitrile(126-98-7), ethyl methacrylate(97-63-2), methylacrylate, inhibited(96-33-3). May produce an allergic reaction EUH066 - Repeated exposure may cause skin dryness or cracking
No labeling applicable	

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
n-pentane (Component)	(CAS No) 109-66-0 (EC-No.) 203-692-4 (EC index no) 601-006-00-1	94.55	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
methyl propionate (Component)	(CAS No) 554-12-1 (EC-No.) 209-060-4 (EC index no) 607-027-00-2	1.5	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332
ethyl methacrylate (Component)	(CAS No) 97-63-2 (EC-No.) 202-597-5 (EC index no) 607-071-00-2	0.5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335
acetone (Component) substance with a Community workplace exposure limit	(CAS No) 67-64-1 (EC-No.) 200-662-2 (EC index no) 606-001-00-8	0.2	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
methacrylonitrile (Component)	(CAS No) 126-98-7 (EC-No.) 204-817-5 (EC index no) 608-010-00-2	0.1	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Sens. 1, H317
methylacrylate, inhibited (Component)	(CAS No) 96-33-3 (EC-No.) 202-500-6 (EC index no) 607-034-00-0	0.1	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335
methanol (Component) substance with a Community workplace exposure limit	(CAS No) 67-56-1 (EC-No.) 200-659-6 (EC index no) 603-001-00-X	0.05	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370

Name	Product identifier	Specific concentration limits
methacrylonitrile (Component)	(CAS No) 126-98-7 (EC-No.) 204-817-5 (EC index no) 608-010-00-2	(C >= 0.2) Skin Sens. 1, H317
methanol (Component)	(CAS No) 67-56-1 (EC-No.) 200-659-6 (EC index no) 603-001-00-X	( 3 <=C < 10) STOT SE 2, H371 (C >= 10) STOT SE 1, H370

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Repeated exposure may cause skin dryness or cracking.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects after inhalation	: May cause drowsiness or dizziness.
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#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.

#### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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##### 6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapors/spray.
Emergency procedures	: Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up in absorbent material. Collect spillage.
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#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed	: Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only non-sparking tools. Use only outdoors or in a well-ventilated area.
Hygiene measures	: Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

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

Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.
Storage conditions	: Keep in fireproof place. Keep container tightly closed. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.
Incompatible materials	: Direct sunlight. Heat sources.

#### 7.3. Specific end use(s)

No additional information available

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

acetone (67-64-1)		
EU	IOELV TWA (mg/m <sup>3</sup> )	1210 mg/m <sup>3</sup> (Acetone; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
EU	IOELV TWA (ppm)	500 ppm (Acetone; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
Belgium	Limit value (mg/m <sup>3</sup> )	1210 mg/m <sup>3</sup> (Acétone; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Limit value (ppm)	500 ppm (Acétone; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Short time value (mg/m <sup>3</sup> )	2420 mg/m <sup>3</sup> (Acétone; Belgium; Short time value)
Belgium	Short time value (ppm)	1000 ppm (Acétone; Belgium; Short time value)
France	VLE (mg/m <sup>3</sup> )	2420 mg/m <sup>3</sup> (Acétone; France; Short time value; VRC: Valeur réglementaire contraignante)
France	VLE (ppm)	1000 ppm (Acétone; France; Short time value; VRC: Valeur réglementaire contraignante)
France	VME (mg/m <sup>3</sup> )	1210 mg/m <sup>3</sup> (Acétone; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
France	VME (ppm)	500 ppm (Acétone; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	500 ppm (Acetone; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	750 ppm (Acetone; USA; Short time value; TLV - Adopted Value)
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	1210 mg/m <sup>3</sup> (Aceton; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Netherlands	Grenswaarde TGG 8H (ppm)	501 ppm (Aceton; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Netherlands	Grenswaarde TGG 15MIN (mg/m <sup>3</sup> )	2420 mg/m <sup>3</sup> (Aceton; Netherlands; Short time value; Public occupational exposure limit value)
Netherlands	Grenswaarde TGG 15MIN (ppm)	1002 ppm (Aceton; Netherlands; Short time value; Public occupational exposure limit value)
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	1210 mg/m <sup>3</sup> Acetone; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL TWA (ppm)	500 ppm Acetone; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	3620 mg/m <sup>3</sup> Acetone; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (ppm)	1500 ppm Acetone; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
methanol (67-56-1)		
EU	IOELV TWA (mg/m <sup>3</sup> )	260 mg/m <sup>3</sup> (Methanol; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
EU	IOELV TWA (ppm)	200 ppm (Methanol; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
Belgium	Limit value (mg/m <sup>3</sup> )	266 mg/m <sup>3</sup> (Alcool méthylique; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Limit value (ppm)	200 ppm (Alcool méthylique; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Short time value (mg/m <sup>3</sup> )	333 mg/m <sup>3</sup> (Alcool méthylique; Belgium; Short time value)
Belgium	Short time value (ppm)	250 ppm (Alcool méthylique; Belgium; Short time value)
France	VLE (mg/m <sup>3</sup> )	1300 mg/m <sup>3</sup> (Methanol; France; Short time value; VL: Valeur non réglementaire indicative)

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<b>methanol (67-56-1)</b>		
France	VLE (ppm)	1000 ppm (Methanol; France; Short time value; VL: Valeur non réglementaire indicative)
France	VME (mg/m <sup>3</sup> )	260 mg/m <sup>3</sup> (Methanol; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
France	VME (ppm)	200 ppm (Methanol; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200 ppm (Methanol; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	250 ppm (Methanol; USA; Short time value; TLV - Adopted Value)
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	133 mg/m <sup>3</sup> (Methanol; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Netherlands	Grenswaarde TGG 8H (ppm)	100 ppm (Methanol; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	266 mg/m <sup>3</sup> Methanol; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL TWA (ppm)	200 ppm Methanol; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	333 mg/m <sup>3</sup> Methanol; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (ppm)	250 ppm Methanol; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
<b>n-pentane (109-66-0)</b>		
EU	IOELV TWA (mg/m <sup>3</sup> )	3000 mg/m <sup>3</sup> (Pentane; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
EU	IOELV TWA (ppm)	1000 ppm (Pentane; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
Belgium	Limit value (mg/m <sup>3</sup> )	1800 mg/m <sup>3</sup> (Pentane, tous isomères; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Limit value (ppm)	600 ppm (Pentane, tous isomères; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Short time value (mg/m <sup>3</sup> )	2250 mg/m <sup>3</sup> (Pentane, tous isomères; Belgium; Short time value)
Belgium	Short time value (ppm)	750 ppm (Pentane, tous isomères; Belgium; Short time value)
France	VME (mg/m <sup>3</sup> )	3000 mg/m <sup>3</sup> (n-Pentane; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
France	VME (ppm)	1000 ppm (n-Pentane; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	1000 ppm (Pentane, all isomers; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	1800 mg/m <sup>3</sup> (n-Pentane; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Netherlands	Grenswaarde TGG 8H (ppm)	600 ppm (n-Pentane; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	1800 mg/m <sup>3</sup> Pentane; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL TWA (ppm)	600 ppm Pentane; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)

### 8.2. Exposure controls

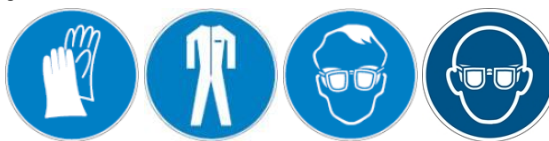
Appropriate engineering controls : Either local exhaust or general room ventilation is usually required.

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Personal protective equipment : Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.



Hand protection : Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.

Eye protection : Chemical goggles or safety glasses. Safety glasses.

Skin and body protection : Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Other information : Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Color	: Colorless.
Odor	: characteristic.
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapor
Relative density	: No data available
Solubility	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

May release flammable gases.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

acetone (67-64-1)	
LD50 oral rat	5800 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	20000 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; >7426 mg/kg bodyweight; Rabbit; Weight of evidence)
LC50 inhalation rat (mg/l)	71 mg/l/4h (Rat; Experimental value; 76 mg/l/4h; Rat; Experimental value)

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<b>acetone (67-64-1)</b>	
LC50 inhalation rat (ppm)	30000 ppm/4h (Rat; Experimental value)
ATE CLP (oral)	5800 mg/kg body weight
ATE CLP (dermal)	20000 mg/kg body weight
ATE CLP (gases)	30000 ppmV/4h
ATE CLP (vapors)	71 mg/l/4h
ATE CLP (dust, mist)	71 mg/l/4h
<b>ethyl methacrylate (97-63-2)</b>	
LD50 oral rat	14800 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	38 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	8300 ppm/4h (Rat)
ATE CLP (oral)	14800 mg/kg body weight
ATE CLP (gases)	8300 ppmV/4h
ATE CLP (vapors)	38 mg/l/4h
ATE CLP (dust, mist)	38 mg/l/4h
<b>methacrylonitrile (126-98-7)</b>	
LD50 oral rat	64 - 73 mg/kg (Rat)
LD50 dermal rabbit	280 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	0.66 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	328 ppm/4h (Rat)
ATE CLP (oral)	64 mg/kg body weight
ATE CLP (dermal)	280 mg/kg body weight
ATE CLP (gases)	328 ppmV/4h
ATE CLP (vapors)	0.66 mg/l/4h
ATE CLP (dust, mist)	0.66 mg/l/4h
<b>methanol (67-56-1)</b>	
LD50 oral rat	> 5000 mg/kg (Rat; BASF test; Literature study; 1187-2769 mg/kg bodyweight; Rat; Weight of evidence)
LD50 dermal rabbit	15800 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	64000 ppm/4h (Rat; Literature study)
ATE CLP (oral)	100 mg/kg body weight
ATE CLP (dermal)	300 mg/kg body weight
ATE CLP (gases)	700 ppmV/4h
ATE CLP (vapors)	3 mg/l/4h
ATE CLP (dust, mist)	0.5 mg/l/4h
<b>methylacrylate, inhibited (96-33-3)</b>	
LD50 oral rat	277 mg/kg (Rat)
LD50 dermal rabbit	1243 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	5 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	1350 ppm/4h (Rat)
ATE CLP (oral)	277 mg/kg body weight
ATE CLP (dermal)	1243 mg/kg body weight
ATE CLP (gases)	1350 ppmV/4h
ATE CLP (vapors)	5 mg/l/4h
ATE CLP (dust, mist)	5 mg/l/4h
<b>methyl propionate (554-12-1)</b>	
LD50 oral rat	> 5000 mg/kg (Rat, Literature study)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Literature study)
ATE CLP (gases)	4500 ppmV/4h
ATE CLP (vapors)	11 mg/l/4h
ATE CLP (dust, mist)	1.5 mg/l/4h
<b>n-pentane (109-66-0)</b>	
LD50 oral rat	> 2000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value)

Skin corrosion/irritation	: Not classified Repeated exposure may cause skin dryness or cracking
Serious eye damage/irritation	: Not classified Based on available data, the classification criteria are not met

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Respiratory or skin sensitization	: Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met May cause cancer
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity – single exposure	: May cause drowsiness or dizziness.
Specific target organ toxicity – repeated exposure	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water : Toxic to aquatic life with long lasting effects.

<b>acetone (67-64-1)</b>	
LC50 fish 2	5540 mg/l (LC50; EU Method C.1; 96 h; Salmo gairdneri; Static system; Fresh water; Experimental value)
EC50 Daphnia 2	12600 mg/l (LC50; Other; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
<b>methacrylonitrile (126-98-7)</b>	
LC50 fish 1	100 - 1000 mg/l (LC50; 96 h)
<b>methanol (67-56-1)</b>	
LC50 fish 1	15400 mg/l (LC50; EPA 660/3 - 75/009; 96 h; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 1	> 10000 mg/l (EC50; DIN 38412-11; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
LC50 fish 2	10800 mg/l (LC50; 96 h; Salmo gairdneri)
<b>methylacrylate, inhibited (96-33-3)</b>	
LC50 fish 1	4.9 mg/l (LC50; 72 h; Carassius auratus)
EC50 Daphnia 1	2.2 mg/l (EC50; 48 h)
<b>methyl propionate (554-12-1)</b>	
LC50 fish 1	175 - 193 mg/l (Leuciscus idus, Static system, Literature study)

### 12.2. Persistence and degradability

<b>Custom Volatile Mix</b>	
Persistence and degradability	May cause long-term adverse effects in the environment.
<b>acetone (67-64-1)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	1.43 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.92 g O <sub>2</sub> /g substance
ThOD	2.2 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.872 (20 days; Literature study)
<b>ethyl methacrylate (97-63-2)</b>	
Persistence and degradability	Biodegradable in water.
<b>methacrylonitrile (126-98-7)</b>	
Persistence and degradability	Biodegradable in the soil.
<b>methanol (67-56-1)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.42 g O <sub>2</sub> /g substance
ThOD	1.5 g O <sub>2</sub> /g substance



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<b>methanol (67-56-1)</b>	
BOD (% of ThOD)	0.8 (Literature study)
<b>methylacrylate, inhibited (96-33-3)</b>	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.875 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.35 g O <sub>2</sub> /g substance
ThOD	1.67 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.648
<b>methyl propionate (554-12-1)</b>	
Persistence and degradability	Biodegradable in water.
<b>n-pentane (109-66-0)</b>	
Persistence and degradability	Readily biodegradable in water. Low potential for adsorption in soil.
<b>12.3. Bioaccumulative potential</b>	
<b>Custom Volatile Mix</b>	
Bioaccumulative potential	Not established.
<b>acetone (67-64-1)</b>	
BCF fish 1	0.69 (BCF)
BCF other aquatic organisms 1	3 (BCF; BCFWIN)
Log Pow	-0.24 (Test data)
Bioaccumulative potential	Not bioaccumulative.
<b>ethyl methacrylate (97-63-2)</b>	
BCF fish 1	5 - 18 (BCF)
Log Pow	1.94
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>methacrylonitrile (126-98-7)</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>methanol (67-56-1)</b>	
BCF fish 1	< 10 (BCF; 72 h; Leuciscus idus)
Log Pow	-0.77 (Experimental value; Other)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>methylacrylate, inhibited (96-33-3)</b>	
Log Pow	0.36 - 0.8
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>methyl propionate (554-12-1)</b>	
BCF other aquatic organisms 1	2.5 (Calculated value)
Log Pow	0.82 (QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>n-pentane (109-66-0)</b>	
BCF fish 1	171 (BCF)
Log Pow	3.45 (Experimental value; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>12.4. Mobility in soil</b>	
<b>acetone (67-64-1)</b>	
Surface tension	0.0237 N/m
<b>methacrylonitrile (126-98-7)</b>	
Surface tension	0.024 N/m (20 °C)
<b>methanol (67-56-1)</b>	
Surface tension	0.023 N/m (20 °C)
Log Koc	Koc,PCKOCWIN v1.66; 1; Calculated value
<b>methylacrylate, inhibited (96-33-3)</b>	
Surface tension	0.024 N/m (20 °C)
<b>methyl propionate (554-12-1)</b>	
Log Koc	1.82 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.
<b>n-pentane (109-66-0)</b>	
Surface tension	0.015 N/m (25 °C; 100 %; 0.013 N/m; 20 °C)

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### n-pentane (109-66-0)

Log Koc : log Koc,2.9; QSAR

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

No additional information available

#### 12.6. Other adverse effects

Additional information : Avoid release to the environment

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Additional information : Handle empty containers with care because residual vapors are flammable.  
Ecology - waste materials : Avoid release to the environment.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR) : 1993  
UN-No. (IATA) : 1993  
UN-No. (IMDG) : 1993  
UN-No. (ADN) : 1993

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, N.O.S.  
Proper Shipping Name (IATA) : Flammable liquid, n.o.s.  
Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S.  
Proper Shipping Name (ADN) : FLAMMABLE LIQUID, N.O.S.  
Transport document description (ADR) : UN 1993 FLAMMABLE LIQUID, N.O.S., 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS

#### 14.3. Packing group

Class (ADR) : 3  
Classification code (ADR) : F1  
Class (IATA) : 3  
Class (IMDG) : 3  
Class (ADN) : 3  
Classification code (ADN) : F1  
Hazard labels (ADR) : 3



Hazard labels (IATA) : 3



Hazard labels (IMDG) : 3



Hazard labels (ADN) : 3



#### 14.4. Packing group

Packing group (ADR) : II

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Packing group (IATA) : II  
Packing group (IMDG) : II  
Packing group (ADN) : II

### 14.5. Environmental hazards

Dangerous for the environment :



Other information : No supplementary information available.

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

Hazard identification number (Kemler No.) : 33  
Classification code (ADR) : F1  
Orange plates :



Special provision (ADR) : 274, 601, 640D  
Transport category (ADR) : 2  
Tunnel restriction code (ADR) : D/E  
Limited quantities (ADR) : 1I  
Excepted quantities (ADR) : E2

#### 14.6.2. Transport by sea

Special provision (IMDG) : 274  
Limited quantities (IMDG) : 1 L  
Excepted quantities (IMDG) : E2  
Packing instructions (IMDG) : P001  
IBC packing instructions (IMDG) : IBC02  
Tank instructions (IMDG) : T7  
Tank special provisions (IMDG) : TP1, TP8, TP28  
EmS-No. (Fire) : F-E  
EmS-No. (Spillage) : S-E  
Stowage category (IMDG) : B

#### 14.6.3. Air transport

CAO packing instructions (IATA) : 364  
CAO max net quantity (IATA) : 60L  
PCA packing instructions (IATA) : 353  
PCA Limited quantities (IATA) : Y341  
PCA limited quantity max net quantity (IATA) : 1L  
PCA max net quantity (IATA) : 5L  
PCA Excepted quantities (IATA) : E2  
Special provision (IATA) : A3  
ERG code (IATA) : 3H

#### 14.6.4. Inland waterway transport

Special provision (ADN) : 274, 601, 640D  
Limited quantities (ADN) : 1 L  
Excepted quantities (ADN) : E2  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP, EX, A  
Ventilation (ADN) : VE01  
Number of blue cones/lights (ADN) : 1  
Carriage prohibited (ADN) : No

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

##### 15.1.2. National regulations

###### Germany

Water hazard class (WGK) : 2 - hazardous to water

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

PHV SDS EU

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