



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

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P403+P235

Store in a well-ventilated place. Keep cool.

P501

Dispose of waste according to applicable legislation.

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
108-65-6	2-methoxy-1-methylethyl acetate			> 99 %
	203-603-9	607-195-00-7	01-2119475791-29	
	Flam. Liq. 3; H226			
70657-70-4	2-methoxypropyl acetate			< 0,3 %
	274-724-2	607-251-00-0	01-2119857599-15	
	Flam. Liq. 3, Repr. 1B, STOT SE 3; H226 H360D H335			

Full text of H and EUH statements: see section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

##### After inhalation

Provide fresh air. In case of breathing difficulties administer oxygen. If victim is at risk of losing consciousness, position and transport on their side. In case of respiratory tract irritation, consult a physician.

##### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing. In case of skin irritation, seek medical treatment.

##### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

##### After ingestion

Rinse mouth immediately and drink plenty of water.

Caution if victim vomits: Risk of aspiration!

Medical treatment necessary.

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

No data available

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

 Carbon dioxide (CO<sub>2</sub>). Dry extinguishing powder. Foam.

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#### Unsuitable extinguishing media

High power water jet.

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

In case of fire and/or explosion do not breathe fumes.

#### **5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing. Full protective suit.

### SECTION 6: Accidental release measures

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

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Do not rinse down with water. Collect in closed containers for disposal. Clean contaminated articles and floor according to the environmental legislation.

#### **6.4. Reference to other sections**

Treat the recovered material as prescribed in the section on waste disposal.

See protective measures under point 7 and 8.

### SECTION 7: Handling and storage

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Use only in well-ventilated areas. Only use the material in places where open light, fire and other flammable sources can be kept away. Do not breathe vapour/aerosol.

##### **Advice on protection against fire and explosion**

Take precautionary measures against static discharges.

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

##### **Requirements for storage rooms and vessels**

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

##### **Advice on storage compatibility**

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

##### **Further information on storage conditions**

Protect against: heat.

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

developer liquid

Product Categories [PC] 30: Photosensitive agent and other photochemicals

Sector of uses [SU] 16: Manufacture of computer, electronic and optical products, electrical equipment.

### SECTION 8: Exposure controls/personal protection

#### **8.1. Control parameters**

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#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
108-65-6	1-Methoxypropyl acetate	50	274		TWA (8 h)	WEL
		100	548		STEL (15 min)	WEL

#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
108-65-6	2-methoxy-1-methylethyl acetate			
Consumer DNEL, long-term		oral	systemic	1,67 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	153,5 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	54,8 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	275 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	33 mg/m <sup>3</sup>

#### Additional advice on limit values

No data available

#### 8.2. Exposure controls



#### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Wear personal protection equipment. Provide adequate ventilation.

#### Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

#### Eye/face protection

Suitable eye protection: Tightly sealed safety glasses.

#### Hand protection

Tested protective gloves are to be worn: Single-use gloves.  
 German Industry Norms (DIN) / European Norms (EN): DIN EN 374

Duration of wearing with permanent contact:

Suitable material: Butyl rubber.

Thickness of glove material: 0.7 mm

penetration time (maximum wearing period): > 480 min

Recommended protective gloves brand: KCL 898 Butoject, Manufacturer: KCL GmbH, D-36124 Eichenzell,

Source of supply: www.kcl.de

Wearing time with occasional contact (splashes):

Suitable material: NBR (Nitrile rubber).

Thickness of glove material: 0.4 mm

penetration time (maximum wearing period): > 30 min

Recommended protective gloves brand: KCL 730 Camatril-Velours, Manufacturer: KCL GmbH, D-36124

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Eichenzell, Source of supply: www.kcl.de

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Skin protection

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

#### Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Respiratory protection necessary at: aerosol or mist generation. Filtering device (full mask or mouthpiece) with filter: A

#### Environmental exposure controls

Do not empty into drains.

## SECTION 9: Physical and chemical properties

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

Physical state:	liquid
Colour:	colourless - light yellow
Odour:	characteristic

#### Test method

pH-Value: No data available

#### Changes in the physical state

Melting point:	No data available
Initial boiling point and boiling range:	148 °C
Flash point:	48 °C

#### Flammability

Solid:	not applicable
Gas:	not applicable

#### Explosive properties

The product is: not explosive.

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Lower explosion limits:	1,2 vol. %
Upper explosion limits:	10,6 vol. %
Ignition temperature:	315 °C

#### Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature: not determined

#### Oxidizing properties

Not oxidizing.

Vapour pressure: (at 20 °C)	5 hPa
Vapour pressure: (at 50 °C)	21 hPa
Density (at 20 °C):	0,97 g/cm <sup>3</sup>
Water solubility: (at 20 °C)	190 g/L

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#### Solubility in other solvents

not determined

Partition coefficient:

No data available

 Viscosity / dynamic:  
(at 25 °C)

&lt;7 mPa·s

Viscosity / kinematic:

No data available

Flow time:

No data available

Vapour density:

No data available

Evaporation rate:

No data available

#### 9.2. Other information

No data available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Flammable, Ignition hazard.

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4. Conditions to avoid

UV-radiation/sunlight.

Keep away from heat. Keep away from sources of ignition. - No smoking.

Ignition hazard.

#### 10.5. Incompatible materials

Oxidizing agents. (Ignition hazard.)

#### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose		Species	Source
108-65-6	2-methoxy-1-methylethyl acetate				
	oral	LD50	8532 mg/kg	Rat	RTECS
	dermal	LD50	7500 mg/kg	Rabbit	

##### Irritation and corrosivity

Based on available data, the classification criteria are not met.

##### Sensitising effects

Based on available data, the classification criteria are not met.

##### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

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#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### Additional information on tests

No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

not determined

CAS No	Chemical name		Dose	[h]   [d]	Species	Source
108-65-6	2-methoxy-1-methylethyl acetate					
	Acute fish toxicity	LC50	161 mg/l	96 h	Pimephales promelas	
	Acute crustacea toxicity	EC50	408 mg/l	48 h	Daphnia magna	
	Crustacea toxicity	NOEC	>100 mg/l	21 d	Daphnia magna	

### 12.2. Persistence and degradability

Easily biodegradable (concerning to the criteria of the OECD)

### 12.3. Bioaccumulative potential

Distribution coefficient (n-octanol / water) (log P O/W): 0,43 at °C: 25 (literature value)

On the basis of existing data about disposal/decomposition and bio-accumulation potential, long term environmental damage is unlikely.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
108-65-6	2-methoxy-1-methylethyl acetate	0,43

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

No data available

### 12.6. Other adverse effects

No data available

#### Further information

Do not allow uncontrolled leakage of product into the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Delivery to an approved waste disposal company.

#### Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

### Land transport (ADR/RID)

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**14.1. UN number:** UN 3272  
**14.2. UN proper shipping name:** ESTERS, N.O.S. (1-Methoxy-2-propyl acetate)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Classification code: F1  
 Special Provisions: 274  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 Transport category: 3  
 Hazard No: 30  
 Tunnel restriction code: D/E

#### Marine transport (IMDG)

**14.1. UN number:** UN 3272  
**14.2. UN proper shipping name:** ESTERS, N.O.S. (1-Methoxy-2-propyl acetate)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Special Provisions: 223, 274  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 EmS: F-E, S-D

#### Air transport (ICAO)

**14.1. UN number:** UN 3272  
**14.2. UN proper shipping name:** ESTERS, N.O.S. (1-Methoxy-2-propyl acetate)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Special Provisions: A3  
 Limited quantity Passenger: 10 L  
 Passenger LQ: Y344  
 Excepted quantity: E1  
 IATA-packing instructions - Passenger: 355  
 IATA-max. quantity - Passenger: 60 L  
 IATA-packing instructions - Cargo: 366  
 IATA-max. quantity - Cargo: 220 L

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

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#### 14.6. Special precautions for user

No data available

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

### SECTION 15: Regulatory information

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

##### EU regulatory information

2004/42/EC (VOC): 100 % (970 g/l)

##### Additional information

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

##### National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D): 1 - slightly water contaminating

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### Changes

chapter: 1; 2; 3; 5; 7; 9; 10; 11; 13; 14; 15

#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

#### Relevant H and EUH statements (number and full text)

H226 Flammable liquid and vapour.

H335 May cause respiratory irritation.

H360D May damage the unborn child.

#### Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*