



according to Regulation (EC) No. 1907/2006 (REACH)

Version: 2

Language: EN

Revision date: 04.04.2016

# 1. Identification of the substance/mixture and of the company/undertaking

# **1.1 Product identifier**

# **Erkosit liquid**

CAS number:	
EC number (EINECS/ELINCS):	
EC index number:	
REACH registration number:	

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

Identified uses of the<br/>substance or mixture:Plastic articlesNot recommended uses of the<br/>substance or mixture:Other

# 1.3 Details of the supplier of the safety data sheet

Manufacturer ERKODENT Erich Kopp GmbH Siemensstrasse 3

 Telephone:
 07445 8501 0

 Fax:
 07445 2092

D 72285 Pfalzgrafenweiler

Supplier

Telephone: Fax:

Information contact ERKODENT Erich Kopp GmbH

Information Telephone: 07445 8501 21 Information fax: E-mail (competent person): w.heuchert@erkodent.com Website: www.erkodent.com

National contact ERKODENT Erich Kopp GmbH

Information Telephone: 07445 8501 0 Information fax: E-mail (competent person): info@erkodent.com Website:

# 1.4 Emergency telephone number

ERKODENT Erich Kopp GmbH Only available during office hours. Telephone: 07445 8501 0

# 1.5 Dept. responsible for information

Entwicklung +49 (0) 7445 8501-21

# 2. Hazards identification

# 2.1 Classification of the substance or mixture

Regulation (EC) No 1272/2008: Flam. Liq. 2; H225 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Skin Sens. 1; H317 , STOT SE 3; H335

Directive 67/548/EEC: F; R11 , Xi; R38 , Xi; R37 , -; R43

# 2.2 Label elements

# 2.2.1 Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms:



	GHS02, GHS07
Signal word:	Danger
H phrases:	225 Highly flammable liquid and vapour.
•	315 Causes skin irritation.
	317 May cause an allergic skin reaction.
	319 Causes serious eye irritation.
	335 May cause respiratory irritation.
P phrases:	210 Keep away from heat/sparks/open flames/hot surfaces No smoking.
-	241 Use explosion-proof electrical/ventilating/lighting/.?/ equipment.
	303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated
	clothing. Rinse skin with water/shower.
	321 Specific treatment (see 4. on this label).
	405 Store locked up.
	501 Dispose of contents/container in accordance with the regional and national
	regulations

# 2.2.2 Labelling according to Directive 67/548/EEC

## Hazard symbols:

×	*

Xi	Irritant.
F	Highly flammable.
11	Highly flammable.
37	Irritating to respiratory system.
38	Irritating to skin.
43	May cause sensitization by skin contact.
9	Keep container in a well-ventilated place.
16	Keep away from sources of ignition - No smoking.
23	Do not breathe gas/fumes/vapour/spray.
24	Avoid contact with skin.
37	Wear suitable gloves.
60	This material and its container must be disposed of as hazardous waste.
	F 11 37 38 43 9 16 23 24 37

## 2.3 Other hazards

none

# 3. Composition/information on ingredients

## 3.1 Chemical characterization of the substance or mixture

Aktivatorhaltige Flüssigkeit aus Methacrylsäureester Methyl methacrylate, monomer, stabilized (Gemisch, mixture)

# 3.2 Composition of the substance or mixture

Substance:	EC-no.:	CAS-No.:	INDEX no.:	REACH- no.:	Concentratio n:	Classification: EC 1272/2008(CLP):	Classificatio n: 67/548/EEC:
Methacrylsäuremethyleste r	201-297-1	80-62-6	607-035-00-6		50-75 %	Flam. Liq. 2; H225 STOT SE 3; H335 Skin Irrit. 2; H315 Skin Sens. 1; H317	F; R11 Xi; R37/38 -; R43
Hexylmethacrylat	205-521-9	142-09-6	607-134-00-4		2,5-10 %	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335	Xi; R36 Xi; R37 Xi; R38

#### Ingredients with EC exposure limits

tance: EC-no.: CAS-No.:		REACH- no.:	Concentratio n:	Classification: EC 1272/2008(CLP):	Classificatio n: 67/548/EEC:
-------------------------	--	----------------	--------------------	------------------------------------	------------------------------------

(The wording of the listed risk phrases is given in Chapter 16)

# 3.3 Additional information

none

# 4. First aid measures

# 4.1 Description of first aid measures

General information:	Remove contaminated clothing immediatley and dispose off safely.
Following inhalation:	In case of inhalation of aerosols/spray mist/splash spots: Consult physician. If unconscious place in recovery position and seek medical advice.
After skin contact:	After contact with skin, wash immediately with plenty of water and soap. Seek medical attention if problems persist.
Following eye contact:	In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.
After ingestion:	Do not induce vomiting. Immediately get medical attention.
Self-protection:	First aid assistant: Pay attention to self-protection!
4.2 Most important sy	mptoms and effects, both acute and delayed
Symptoms:	Depression of the central nervous system. Causes skin irritation. May cause sensitisation especially in sensitive humans.
Nature of Hazard:	shortage of breath.

#### **4.3 Indication of any immediate medical attention and special treatment needed Emergency aid:** Let water be swallowed in little sips (dilution effect). **Treatment:** Treat symptomatically.

## 5. Fire fighting measures

## 5.1 General information

Use water spray/stream to protect personnel and to cool endangered containers.

## 5.2 Extinguishing media

Suitable:Extinguishing powder. Carbon dioxide. alcohol resistant foam.Unsuitable:Water.

# 5.3 Special hazards arising from the substance or mixture

Vapours may form explosive mixtures with air.

## 5.4 Advice for fire fighters

#### Special protective equipment for fire-fighters

In case of fire: Wear self-contained breathing apparatus.

#### Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

# 6. Accidental release measures

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

Provide adequate ventilation. Wear personal protection equipment. Remove all sources of ignition. Avoid contact with skin, eyes and clothes.

#### 6.2 Environmental precautions

Do not empty into drains or the aquatic environment. Do not allow to enter into soil/subsoil.

#### 6.3 Methods and materials for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the assimilated material according to the section on waste disposal.

#### 6.4 References to other sections

Wet clean or vacuum up solids. Clear spills immediately. Do not use a brush or compressed air for cleaning surfaces or clothing.

## 7. Handling and storage

## 7.1 Precautions for safe handling

**Information for safe handling** Protect against: Heating UV-radiation/sunlight.

**Technical measures** Use extractor hood (laboratory).

**Precautions against fire and explosion** Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.

Additional information none

#### 7.2 Conditions for safe storage, including any incompatibilities Technical measures and storage conditions

No special technical protective measures are necessary.

#### Packaging materials

Keep/Store only in original container.

#### **Requirements for storerooms and containers**

Keep in a cool, well-ventilated place. Put lids on containers immediately after use.

#### Information about storing together in storage facility

Keep away from food, drink and animal feedingstuffs.

#### Further information concerning storage conditions

Always close containers tightly after the removal of product.

Storage class: 3

## 7.3 Specific end use(s)

Observe instructions for use.

## 8. Exposure controls / personal protection

#### 8.1 Control parameters

# 8.1.1 Limits for occupational exposure

## Exposure limit values

Substance:	CAS-No.:	Source:	Occupational exposure limit value:	Limitation of exposure peaks:	Remark:
Methacrylsäuremethyleste r	80-62-6	AGW	210 mg/m3; 50 ml/m3		2 (I); DFG, Y

#### EC exposure limit values

Substance:	CAS-No.:	Source:	Occupational exposure limit value:	Limitation of exposure peaks:	Remark:
			-		

# 8.1.2 DNEL and PNEC values

DNEL-values

Substance:	CAS-No.:	DNEL/DMEL	Industry	Professional	consumer

**PNEC-values** 

Substance: CAS-No.: PNEC	Worker, industry	Worker, professional	consumer
--------------------------	------------------	----------------------	----------

#### 8.1.3 Control-Banding

**Control-Banding** 

none

# 8.1.4 Additional information

Y: A risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept

#### 8.2 Exposure controls

Occupational exposure controls none

#### **Chemical handling**

Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and at the end of work. Take off immediately all contaminated clothing.

## Personal protection equipment

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

#### **Respiratory protection**

With correct and proper use, and under normal conditions, breathing protection is not required. Technical ventilation of workplace.

#### Hand protection

Suitable gloves type: Butyl rubber. liquid-tight Solvent/Thinner.

#### Eye protection

Tightly sealed safety glasses.

#### Skin protection

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

#### **Environmental exposure controls**

refer to chapter 7. No further action is necessary. Do not empty into drains or the aquatic environment.

#### **Consumer exposure controls**

refer to chapter 7. No further action is necessary.

#### 8.3 Exposure scenario

none

# 9. Physical and chemical properties

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

Appearance	
State of matter:	liquid
Colour:	colourless
Odour:	characteristic like: ester
Odour threshold:	No data available

Safety relevant basis data

Density:	Parameter at °C: 20	<b>Value</b> 0.97	Unit g/cm <sup>3</sup>	Remark
Package density: pH:		0,01	9, 0111	not determined not determined
Melting point / range:		- 48	°C	
Boiling temperature / range:		101	-	
Flash point:		-	0° 0° 0°	
Flammability:		430	°C	
Lower flammability limit:				not determined
Upper flammability limit:				not determined
Explosion hazard:				not explosive. Vapours can form explosive mixtures with air.
Lower explosion limit:		21	Vol-%	literature value
Upper explosion limit:		,	Vol-%	literature value
Ignition temperature:		,•		none Risk of selfignition.
Decomposition temperature:				not determined
Oxidizing characteristics:				not determined
Vapour pressure:	at °C: 20	47	hPa	
Relative vapour density:				not determined
Speed of				not determined

Safety	Data	Sheet
--------	------	-------

slightly soluble not determined

not determined

not determined

not determined

not determined

vaporization/evaporation rate: Solubility in water: Fat solubility: Solubility in log P O/W (n-octanol / water): Viscosity: Solvent separation test: Solvent content:

100 %

## 9.2 Other information

none

# 10. Stability and reactivity

## **10.1 Reactivity**

Polymerization.

#### **10.2 Chemical stability**

none slow decomposition spontaneous decomposition

1

## 10.3 Possibility of hazardous reactions

Can polymerise exothermically if heated, exposed to air, sunlight or by addition or free radical initiators.

## **10.4 Conditions to avoid**

Keep away from heat.

#### **10.5 Incompatible materials**

Heavy metals. Peroxides.

## **10.6 Hazardous decomposition products**

none Hazardous decomposition products

## **10.7 Additional information**

none

# 11. Toxicological information

# 11.1 Information on toxicological effects

Data apply to the principal component.

#### Acute toxicity

Substance:	CAS-No.:	Toxicological information
Methacrylsäuremethyleste r	80-62-6	LD-50 oral > 5000 mg / kg rat (Lit.) LD-50 inhalatziv 7093 ppm / 4 h rat (Lit.)

Specific symptoms in laboratory animals No data available

# 11.2 Irritation and etching

Irritant effect on the skin Irritating to skin. Irritant effect on the eye mild irritant.

## Irritant effect on the respiratory tract

Irritating to respiratory system.

## Etching

No information available.

## **11.3 Sensitization**

Skin sensitisation May cause sensitization by skin contact.

## 11.4 Repeated dose toxicity

No information available.

## 11.5 CMR effects

Carcinogenicity

No information available.

Mutagenicity

# No information available.

Reproductive toxicity No information available.

#### **11.6 General remarks**

Classification: Irritant.

#### Practical experience

No information available.

#### Other observations

No information available.

## Additional information

No information available.

# 12. Ecological information

# 12.1 Toxicity

The information about ecology refers to the main components.

## Eco toxicity

Substance:	CAS-No.:	Ecotoxicity
Methacrylsäuremethyleste r	80-62-6	LC-50 > 79 mg / I OECD 203 NOEC: 40 mg / I ISO 7346 Expositionsd: 96 h EEC84 Spezies: 449 V, C1 Oncorhynchus mykiss

## 12.2 Persistence and degradability

Degradation rate (%): 30,7 not readily biodegradable (according to OECD criteria)

## 12.3 Bio accumulative potential

No information available.

## 12.4 Mobility in soil

No information available.

# 12.5 Results of PBT and vPvB assessment

not applicable

# 12.6 Other adverse effects

No information available.

#### 12.7 Further ecological information

Water Hazard Class: slightly hazardous to water (WGK 1)

## 12.8 Further details

Do not empty into drains or the aquatic environment.

# 13. Disposal considerations

#### 13.1 Waste treatment methods

#### Appropriate disposal/Product

Waste disposal according to official state regulations. Carry out under observation of official regulations covering a chemical/physical treatment plant. Carry out a burning of harzardous waste according to official regulations. Consult the local waste disposal expert about waste disposal.

#### Appropriate disposal/ packaging

Waste disposal according to official state regulations.

# Control report for waste code/ waste marking according to EAKV

Carry out a burning of harzardous waste according to official regulations. **Waste key product:** 07 01 04 - andere organische Lösemittel, Waschflüssigkeiten und

Mutterlaugen

#### Waste key packaging:

#### Remark

. . . . . .

Waste disposal according to official state regulations.

# 14. Transport information

#### 14.1 Overland transport (ADR/RID)

. . . . .

#### Proper Shipping name

Methylmethacrylat, monomer, stabilisiert

UN No.:	1247			
Label:	3	Packing Group:	Classification code: 3 (F1	)
Remark:		Limited quantity (LQ): 4 Transp	port category: 2 tunnel restriction code D/E	

## 14.2 Transport by sea (IMDG)

Proper Shipping name Methyl methacrylate, monomer, stabilized

UN-No.:	1247				
Label:	3	Packing Group:	II		
EmS-No:	F-E, S-D	MFAG:		Marine pollutant:	Nein
Special Prov	isions:				
Remark:					

## 14.3 Air transport (ICAO-TI / IATA-DGR)

## Proper Shipping name

Methyl methacrylate, monomer, stabilized

UN/ID-No.: 1247

Label: Remark: Packing Group: ||

## 14.4 Mail

Label: 3 Packing Group: II Limited quantity (LQ): 4

# 15. Regulatory information

3

## 15.1 Labelling

Hazardous component(s) for labelling Methyl meth acrylate

Special labelling of particular preparations

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

#### **EU-Regulations**

Directive 1999/13/EC on the limitation of emissions of volatile organic compounds (VOC-RL) No information available.

**Regulation (EC) No 2037/2000 on substances that deplete the ozone layer** No information available.

**Regulation (EC) No 850/2004 on persistent organic pollutants** No information available.

**Regulation (EC) No 689/2008 concerning the export and import of dangerous chemicals** No information available.

Regulation (EC) No 648/2004 (Detergents regulation) No information available.

Restrictions under Title VIII of Regulation (EC) No 1907/2006 No information available.

National regulations

Moreover, national legislation has to be observed!

#### Informations on working limitations

According to directive 94/33/EC, juveniles are only allowed to handle this product as long as all effects of dangerous substances are prevented. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### **Major Accidents Ordinance**

No information available.

Storage class according to VCI

## 3

Water Hazard Class according to VwVwS 2 water pollutant (WGK 2)

**Technical Instructions on Air Quality Control (TA-Luft)** No information available.

Further regulations, limitations and legal requirements

Betriebssicherheitsverordnung (BetrSichV) Highly flammable

## 15.3 Chemical safety assessment

For this preparation a chemical safety assessment has been carried out:

For this substance a chemical safety assessment has not been carried out.

# 16. Other information

## 16.1 Wording of the H and R-phrases under paragraph 3 Regulation (EC) No 1272/2008

- Highly flammable liquid and vapour.
- 315 Causes skin irritation.
- 317 May cause an allergic skin reaction.
- 319 Causes serious eye irritation.
- 335 May cause respiratory irritation.

#### Directive 67/548/EEC

- 37 Irritating to respiratory system.
- 38 Irritating to skin.
- 43 May cause sensitization by skin contact.

#### **16.2 Training instructions**

none/none

## 16.3 Recommended restrictions of use

none

#### **16.4 Further remarks**

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.

## 16.5 Documentation of changes

\* Data changed from previous versions

#### 16.6 Data sources

none/none

## 16.7 Key and definition

Wording of the r-phrases under paragraph 3:

#### 17. Appendix

## 17.1 Exposure scenario