

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

### 1.1 Product identifier

# Resilit\_S 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 substance or mixture: Plastic articles  
Not recommended uses of the 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

ERKODENT Erich Kopp GmbH  
Siemensstrasse 3

Telephone: 07445 8501 0  
Fax: 07445 2092

D 72285 Pfalzgrafenweiler

#### 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 , Skin Sens. 1; H317 , STOT SE 3; H335

Directive 67/548/EEC:

Xi; R38 , Xi; R37 , -; R43 , F; R11

### 2.2 Label elements

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

Hazard pictograms:



<b>Signal word:</b>	GHS02, GHS07 Danger
<b>H phrases:</b>	225 Highly flammable liquid and vapour. 315 Causes skin irritation. 317 May cause an allergic skin reaction. 335 May cause respiratory irritation.
<b>P phrases:</b>	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:



<b>R phrases:</b>	Xi Irritant. F Highly flammable. 11 Highly flammable. 37 Irritating to respiratory system. 38 Irritating to skin.
<b>S phrases:</b>	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.

### 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.:	Concentration:	Classification: EC 1272/2008(CLP):	Classification: 67/548/EEC:
Methyl meth acrylate	201-297-1	80-62-6	607-035-00-6		75-100%	Flam. Liq. 2; H225 STOT SE 3; H335 Skin Irrit. 2; H315 Skin Sens. 1; H317	F; R11 Xi; R37/38 -; R43

#### Ingredients with EC exposure limits

Substance:	EC-no.:	CAS-No.:	INDEX no.:	REACH-no.:	Concentration:	Classification: EC 1272/2008(CLP):	Classification: 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 immediately 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 symptoms 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.

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## 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.

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## 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

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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:
Methyl meth acrylate	80-62-6	MAK			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**

	Parameter	Value	Unit	Remark
<b>Density:</b>	at °C:	0,945	g/cm <sup>3</sup>	
<b>Package density:</b>				not determined
<b>pH:</b>				not determined
<b>Melting point / range:</b>		-48	°C	
<b>Boiling temperature / range:</b>		100	°C	
<b>Flash point:</b>		10	°C °C °C	
<b>Flammability:</b>		430	°C	
<b>Lower flammability limit:</b>				not determined
<b>Upper flammability limit:</b>				not determined
<b>Explosion hazard:</b>				XXXX not explosive. Vapours can form explosive mixtures with air.
<b>Lower explosion limit:</b>		2,1	Vol-%	
<b>Upper explosion limit:</b>		12,5	Vol-%	
<b>Ignition temperature:</b>				none Risk of selfignition.
<b>Decomposition temperature:</b>				not determined
<b>Oxidizing characteristics:</b>				not determined
<b>Vapour pressure:</b>	at °C:	47	hPa	
<b>Relative vapour density:</b>				not determined
<b>Speed of vaporization/evaporation rate:</b>				not determined
<b>Solubility in water:</b>				slightly soluble
<b>Fat solubility:</b>				not determined

<b>Solubility in</b>	:	not determined
<b>log P O/W (n-octanol / water):</b>		not determined
<b>Viscosity:</b>		not determined
<b>Solvent separation test:</b>		not determined
<b>Solvent content:</b>	100 %	

## 9.2 Other information

none

## 10. Stability and reactivity

### 10.1 Reactivity

Polymerization.

### 10.2 Chemical stability

none slow decomposition spontaneous decomposition

### 10.3 Possibility of hazardous reactions

Can polymerise exothermically if heated, exposed to air, sunlight or by addition of 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
Methyl meth acrylate	80-62-6	LD-50 oral > 5000 mg / kg rat (Lit.) LD-50 inhalativ 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
Methyl meth acrylate	80-62-6	LC-50 > 79 mg / l OECD 203 NOEC: 40 mg / l ISO 7346 Expositionsd: 96 h EEC84 Spezies: 449 V, C1 Oncorhynchus mykiss

### 12.2 Persistence and degradability

Degradation rate (%): 30,7 28d not readily biodegradable (according to OECD criteria) OECD 301 C

### 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 hazardous 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 hazardous 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:** II

**Classification code:** 3 (F1)

**Remark:** Limited quantity (LQ): 4 Transport 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 Provisions:**

**Remark:**

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

#### Proper Shipping name

Methyl methacrylate, monomer, stabilized

**UN/ID-No.:** 1247

**Label:** 3

**Packing Group:** II

**Remark:**

## 14.4 Mail

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

## 15. Regulatory information

### 15.1 Labelling

#### Hazardous component(s) for labelling

Methyl meth acrylate; Methyl meth acrylate; 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

#### Storage class according to VCI

3

#### Water Hazard Class according to VwVwS

1 weak water pollutant (WGK 1)

#### Technical Instructions on Air Quality Control (TA-Luft)

#### 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.

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## 16. Other information

### 16.1 Wording of the H and R-phrases under paragraph 3

#### Regulation (EC) No 1272/2008

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

#### Directive 67/548/EEC

- 11 Highly flammable.
- 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:

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## 17. Appendix

### 17.1 Exposure scenario

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