



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

### **1.1 Product identifier**

Trade name:

RUCK Kunststoff für Nagelprothetik, Flüssigkeit

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

No further relevant information available

Application of the substance / the mixture Material for artificial nails

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

HELLMUT RUCK GmbH

Daimlerstraße 23

D-75305 Neuenbürg

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e-Mail kontakt@hellmut-ruck.de

### **1.4 Emergency telephone number**

VIZ Universitätsklinikum Freiburg: Phone (24h) +49 (0)761 19240

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## 2 Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2	H225	Highly flammable liquid and vapour.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Dam. 1	H318	Causes serious eye damage.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H335	May cause respiratory irritation.

### 2.2 Label elements

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

The product is classified and labelled according to the CLP regulation.

#### Hazard pictograms



GHS02



GHS05



GHS07

#### Signal word

Danger

#### Hazard-determining components of labelling:

methyl methacrylate

methacrylic acid

#### Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

### Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.  
Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P405 Store locked up.

### 2.3 Other hazards

#### Results of PBT and vPvB assessment

**PBT:** Not applicable.

**vPvB:** Not applicable.

## 3 Composition/information on ingredients

### 3.2 Chemical characterization: Mixtures

#### Description:

#### Dangerous components:

CAS: 80-62-6 EINECS: 201-297-1 Reg.nr.: 01-2119452498-28-0000	methyl methacrylate	Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	> 90%
CAS: 2082-81-7 EINECS: 218-218-1 Reg.nr.: 02-2119849716-25	tetramethylene dimethacrylate	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	0-5%
CAS: 79-41-4 EINECS: 201-204-4	methacrylic acid	Skin Corr. 1A, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; STOT SE 3, H335	0-5%

Additional information: For the wording of the listed hazard phrases refer to section 16.

## 4 First aid measures

### 4.1 Description of first aid measures

#### After inhalation

Supply fresh air; consult doctor in case of symptoms.

#### After skin contact

Instantly wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

#### After eye contact

Rinse opened eye for several minutes under running water. Then consult doctor.

#### After swallowing

Rinse out mouth and then drink plenty of water.

In case of persistent symptoms consult doctor.

Seek immediate medical advice.

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

No further relevant information available

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

No further relevant information available.

## 5 Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing agents:

CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents Water.

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

Can form explosive gas-air mixtures.

Formation of toxic gases is possible during heating or in case of fire.

### 5.3 Advice for firefighters

**Protective equipment:** Wear self-contained breathing apparatus.

**Additional information:** -

## **6 Accidental release measures**

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

Wear protective equipment. Keep unprotected persons away.

### **6.2 Environmental precautions**

Prevent material from reaching sewage system, holes and cellars.

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

Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).

Do not flush with water or aqueous cleansing agents.

Send for recovery or disposal in suitable containers.

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

See Section 13 for information on disposal.

See Section 8 for information on personal protection equipment.

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## 7 Handling and storage

### 7.1 Precautions for safe handling

Keep containers tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

#### **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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

#### **Storage:**

Requirements to be met by storerooms and containers: Store in cool location.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Store in cool, dry conditions in well sealed containers.

### 7.3 Specific end use(s)

No further relevant information available

## 8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

### 8.1 Control parameters

**Components with critical values that require monitoring at the workplace:**

#### 80-62-6 methyl methacrylate

WEL Short-term value: 416 mg/m<sup>3</sup>, 100 ppm

Long-term value: 208 mg/m<sup>3</sup>, 50 ppm

#### 79-41-4 methacrylic acid

WEL Short-term value: 143 mg/m<sup>3</sup>, 40 ppm

Long-term value: 72 mg/m<sup>3</sup>, 20 ppm

Additional information: The lists that were valid during the compilation were used as basis.

### 8.2 Exposure controls

**Personal protective equipment:**

**General protective and hygienic measures:**

Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

**Breathing equipment:**

Not necessary with efficient local exhaust. If exposition to vapours is possible, use breathing protective mask (filter A).



**Protection of hands:**

If skin contact cannot be avoided, protective gloves are recommended to avoid possible sensitization.

Solvent resistant gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Butyl rubber, BR

Nitrile rubber, NBR

Chloroprene rubber, CR

Fluorocarbon rubber (Viton)

**Eye protection:** Safety glasses

**Body protection:** Light weight protective clothing

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### General Information

##### Appearance:

Form:	Fluid
Colour:	Colourless
Smell:	Ester-like
Odour threshold:	Not determined
pH-value:	Not determined
Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined
Flash point:	10 °C
Inflammability (solid, gaseous):	Not applicable
Ignition temperature:	430 °C
Decomposition temperature:	Not determined.
Self-inflammability:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures is possible.
Critical values for explosion:	
Lower:	2.1 Vol %
Upper:	12.5 Vol %
Steam pressure:	Not determined
Density:	Not determined
Relative density:	Not determined
Vapour density:	Not determined
Evaporation rate:	Not determined



Solubility in / Miscibility

with Water:

Not miscible or difficult to mix

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

dynamic:

Not determined.

kinematic:

Not determined.

## **9.2 Other information**

No further relevant information available

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**10 Stability and reactivity****10.1 Reactivity**

No further relevant information available.

**10.2 Chemical stability**

Conditions to be avoided: No decomposition if used and stored according to specifications.

**10.3 Possibility of hazardous reactions**

No dangerous reactions known.

**10.4 Conditions to avoid**

No further relevant information available

**10.5 Incompatible materials**

No further relevant information available

**10.6 Hazardous decomposition products**

None

**Additional information:**

If stored longer than recommended and/or above recommended temperature, product may polymerize generating heat.

## 11 Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

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

#### Primary irritant effect:

Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/irritation

Causes serious eye damage.

#### Respiratory or skin sensitisation

May cause an allergic skin reaction.

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

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

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

#### STOT-single exposure

May cause respiratory irritation.

#### 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.

**12 Ecological information****12.1 Toxicity**

**Aquatic toxicity:** No further relevant information available.

**12.2 Persistence and degradability**

No further relevant information available

**12.3 Bioaccumulative potential**

No further relevant information available

**12.4 Mobility in soil**

No further relevant information available

**12.5 Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable

**12.6 Other adverse effects**

No further relevant information available

## 13 Disposal considerations

### 13.1 Waste treatment methods

#### Recommendation

Small quantities can be polymerized with the matching system component(s) and the cured solid material can be disposed of with the regular garbage. Larger quantities must be disposed of following the regulations of the local authorities.

#### European waste catalogue

16 05 08\* discarded organic chemicals consisting of or containing dangerous substances

#### Uncleaned packagings:

**Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

### 14.1 UN-Number

ADR, IMDG, IATA 1247

### 14.2 UN proper shipping name

**ADR** 1247 METHYL METHACRYLATE MONOMER, STABILIZED, solution

**MDG, IATA** METHYL METHACRYLATE MONOMER, STABILIZED, solution

### 14.3 Transport hazard class(es)

#### ADR



**Class** 3 (F1) Flammable liquids.

**Label** 3

**IMDG, IATA**



**Class** 3 Flammable liquids.

**Label** 3

**14.4 Packing group**

ADR, IMDG, IATA III

**14.5 Environmental hazards:**

Marine pollutant: No

**14.6 Special precautions for user Warning: Flammable liquids**

Kemler Number: 33

EMS Number: F-E,S-D

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**

Not applicable

Transport/Additional information: -

UN "Model Regulation": UN1247, METHYL METHACRYLATE  
MONOMER, STABILIZED, solution, 3, II

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## 15 Regulatory information

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

No further relevant information available

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out

## 16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### Relevant phrases

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

### 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 Harmonised 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 (division of the American Chemical Society)
PBT:	Persistent, Bioaccumulative and Toxic

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- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 2: Flammable liquids, Hazard Category 2
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Corr.1A: Skin corrosion/irritation, Hazard Category 1A
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
- Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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