SECTION 1: Identification of the substance/preparation and of the company/undertaking

1.1. Product identifier
Name of product: BIOCRYL-RESIN Monomer

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

Use of the substance/mixture
Monomer based on Methylmethacrylate for manufacturing of dental prostheses, expanding or repairing dental prostheses, manufacturing of dental regulators and individually formed impression trays.

1.3. Details of the supplier of the safety data sheet
Manufacturer / distributor
SCHEU DENTAL GmbH
Am Burgberg 20
D-58642 Iserlohn
eMail: service@SCHEU-DENTAL.com
Internet: www.SCHEU-DENTAL.com

1.4. Emergency telephone number:
+49 (2374) 9288-0

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the “General Classification guideline for preparations of the EU” in the latest valid version.

Classification system:
The classification is according to the latest editions of the EU-lists, and extendet by company and literature data.

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Flam. Liq. 2 H225; Skin Irrit. 2 H315; Skin Sens. 1 H317; STOT SE 3 H335

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008
The product is classified and labelled according to the CLP regulation.

Signal word: Danger
Hazard Pictograms: GHS02 GHS07

Hazard-determining components of labelling:
methyl methacrylate

Hazard statements
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H332 Harmful by inhalation.
H335 May cause respiratory irritation.
Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P240 Ground/bond container and receiving equipment.
P243 Take precautionary measures against static discharge.
P280 Wear protective gloves/protective clothing/eye protection/face protection. [As modified by IV ATP]

2.3. Other hazards
No further relevant information available.

SECTION 3: Composition / information on ingredients

3.1. Substances
not applicable

3.2. Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>EC-No.</th>
<th>CAS-No.</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Classification according to Regulation (EC) No. 1272/2008 [CLP]</td>
<td></td>
</tr>
<tr>
<td>201-297-1</td>
<td></td>
<td>methyl methacrylate</td>
<td>&gt; 95 %</td>
</tr>
<tr>
<td>80-62-6</td>
<td></td>
<td>Ethyleneglycol dimethacrylate</td>
<td>&lt; 5 %</td>
</tr>
</tbody>
</table>

Additional information
For the wording of the listed H-phrases refer to section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation: Remove patient from exposure, keep warm and at rest. Obtain immediate medical attention.

After contact with skin: Remove contaminated clothing. Wash skin immediately with water. If symptoms (irritation or blistering) occur obtain medical attention.

After contact with eyes: Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.

After ingestion: Do not induce vomiting. Wash out mouth with water and give 200 – 200 ml to drink. Obtain medical attention.

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
Symptomatic treatment.
SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
Fire-extinguishing powder, A.F.F., Foam, CO2

Unsuitable extinguishing media
Water with full jet.

5.2. Special hazards arising from the substance or mixture
Highly flammable. May polymerise on heating. Sealed container may rupture explosively if hot.

5.3. Advice for firefighters

Special protective equipment for firefighters:
A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

Additional information

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Keep away from ignition sources. Ensure adequate ventilation. Avoid inhalation of gases/fumes/aerosols. Avoid contact with skin, eyes and clothes. Wear protective equipment.

6.2. Environmental precautions
Do not allow to enter sewers/surface or ground water.

6.3. Methods and material for containment and cleaning up
Absorb spillages onto sand, earth or any other suitable adsorbent material. DO NOT adsorb onto sawdust or other combustible materials. Transfer to a container for disposal or recovery. Spillages or uncontrolled discharges into watercourses must be alerted to appropriate regulatory body.

6.4. Reference to other sections
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Advice on safe handling
Avoid contact with skin and eyes. Avoid inhalation of high concentrations of vapours. Use only in well ventilated areas.

Advice on protection against fire and explosion
Material is highly flammable, it must be kept from sources of ignition. The vapour is heavier than air, beware of pots and confined spaces. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Storage:

Requirements for storage rooms and vessels
Keep in cool, well ventilated place, separate from oxidising agents. Keep away from sources of ignition – No smoking. Keep away from heat and direct sunlight. Keep the container closed to avoid evaporation of the product.

Information about storage in one common storage facility:
Store away from oxidants and foodstuffs.
Further information on storage conditions
Storage temperature: Preferably not exceeding 25 °C.

Storage class:

7.3. Specific end use(s)
No further relevant information available.

SECTION 8: Exposure controls / personal protection

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

8.1. Control parameters

<table>
<thead>
<tr>
<th>Ingredients with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS-Nr.</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>80-62-6</td>
</tr>
</tbody>
</table>

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

8.2. Exposure controls

Personal protective equipment:
Provide adequate ventilation, including appropriate local extraction. Avoid inhalation of gases/fumes/aerosols.

Protective and hygiene measures:
Take off all contaminated clothing immediately. Create and observe skin protection plan. Wash thoroughly before breaks and after work hands and face, if necessary take a shower. When using do not eat or drink.

Respiratory protection
Wear suitable respiratory equipment (breathing mask type A) if there is inadequate ventilation.

Hand protection
When handling chemical substances, only chemical protective gloves with CE Mark indicating a four digit code have to be worn. Chemical protective gloves must be chosen depending on concentrations of hazardous substances and the specific working place. It is recommended to check the chemical resistance of the aforementioned protective gloves for special applications with the glove manufacturer.

Eye/face protection
Wear safety glasses.

Limitation and supervision of exposure into the environment
The product should not be allowed to drain in sewers. There’s a severe danger of explosion.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Information

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>clear</td>
</tr>
<tr>
<td>Odour:</td>
<td>Ester-like</td>
</tr>
</tbody>
</table>
Material Safety Data Sheet according to (EC) 1907/2006

Tradename: BIOCRYL-RESIN Monomer

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH-value:</td>
<td>not applicable</td>
</tr>
<tr>
<td>Melting point:</td>
<td>-48 °C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>100.3 °C</td>
</tr>
<tr>
<td>Flash point:</td>
<td>10 °C</td>
</tr>
<tr>
<td>Flammable limits (lower) (% v/v)</td>
<td>2.1</td>
</tr>
<tr>
<td>Auto ignition temperature:</td>
<td>430 °C</td>
</tr>
<tr>
<td>Oxidising properties:</td>
<td>not applicable</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>47 mbar at 20 °C</td>
</tr>
<tr>
<td>Relative Density:</td>
<td>0.94 (water =1)</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Miscible with most organic solvents</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>Slightly soluble, 1.5 g/100 ml at 20 °C</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>1.38</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>0.6 mPa*s</td>
</tr>
</tbody>
</table>

9.2. Other information
No further relevant information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability
The product is stabilised with Hydroquinone (CAS-No. 123-31-9). However polymerisation may occur when the expiry date and/or storage temperature is considerably exceeded.

10.3. Possibility of hazardous reactions
At intended storage are no hazardous reactions known.

10.4. Conditions to avoid
Keep away from heat sources, sparks and open flames. Vapours may form explosive mixtures with air.

10.5. Incompatible materials
No further relevant information available.

10.6. Hazardous decomposition products
No dangerous decomposition products known. In the presence of radical formers (peroxides), reducing substances and/or heavy metal ions is exothermic polymerization possible.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity
Harmful by inhalation.

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical name</th>
<th>Exposure routes</th>
<th>Method</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>methyl methacrylate</td>
<td>oral</td>
<td>LD50</td>
<td>7872 mg/kg</td>
<td>rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>9400 mg/kg</td>
<td>rabbit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalativ</td>
<td>LC50</td>
<td>7093 ppm / 4h</td>
<td>rat</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical name</th>
<th>Exposure routes</th>
<th>Method</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>97-90-5</td>
<td>ethyleneglycol dimethacrylate</td>
<td>oral</td>
<td>LD50</td>
<td>3300 mg/kg</td>
<td>rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>not irritant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalativ</td>
<td>not irritant</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Material Safety Data Sheet according to (EC) 1907/2006

 Tradename: BIOCRYL-RESIN Monomer

Primary irritant effect:
Serious eye damage / irritation
On the skin: Irritant to skin and mucous membranes.
On the eye: Irritating to skin (high vapour concentration).

Respiratory or skin sensitization
Sensitization possible through skin contact.

Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Not applicable.

SECTION 12: Ecological Information

12.1. Toxicity

Aquatic toxicity:
Low toxicity to fish.

<table>
<thead>
<tr>
<th>CAS-Nr.</th>
<th>Bezeichnung</th>
<th>Expositionswege</th>
<th>Methode</th>
<th>Dosis</th>
<th>Spezies</th>
<th>Quelle</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>Methylmethacrylat</td>
<td></td>
<td></td>
<td>LC50</td>
<td>&gt;100 mg/l</td>
<td>fish (typically)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LC50</td>
<td>130 mg/l 96 h</td>
<td>fathead minnow</td>
</tr>
</tbody>
</table>

Harmful to aquatic invertebrates
EC 50 (Daphnia magna) (48 hours) 69 mg/l.

Low toxicity to algae
EC50 (selenastrum capricornutum) (96 hours) 170 mg/l
NOEC (zebra fish) (35 days) (flow through) 8,4 mg/l

12.2. Persistence and degradability
Readily biodegradable.
Chemical Oxigen Demand (COD): 88 % (28 days)

Inherent biodegradation:
Dissolved Organic Carbon Removal (DOC removal): > 95 % (28 days)

12.3. Bioaccumulative potential
No further relevant information available.

12.4. Mobility in soil
No further relevant information available.

12.5. Results of PBT an vPvB assessment
PBT: Not applicable
vPvB: Not applicable

12.6. Other adverse effects
No further relevant information available.
SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendation
Disposal should be in accordance with local, state or national legislation. Incinerate under approved controlled conditions, using incinerators for the disposal of Methyl methacrylate.

Uncleaned packaging:
Recommendation:
Decontaminate empty drums before recycling.
Disposal must be made according to official regulations.

SECTION 14: Transport Information

Land transport (ADR/RID)

<table>
<thead>
<tr>
<th>14.1. UN number:</th>
<th>1247</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2. UN proper shipping name:</td>
<td>METHYL METHACRYLATE MONOMER, STABILIZED</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es):</td>
<td>3</td>
</tr>
<tr>
<td>14.4. Packing group:</td>
<td>II</td>
</tr>
<tr>
<td>Hazard label:</td>
<td>3</td>
</tr>
<tr>
<td>Classification code:</td>
<td>F1</td>
</tr>
<tr>
<td>Limited quantity:</td>
<td>1 L</td>
</tr>
<tr>
<td>Transport category:</td>
<td>2</td>
</tr>
<tr>
<td>Hazard No:</td>
<td>339</td>
</tr>
<tr>
<td>Tunnel restriction code:</td>
<td>D/E</td>
</tr>
<tr>
<td>Other applicable information (land transport)</td>
<td></td>
</tr>
</tbody>
</table>

Inland waterways transport (ADN)

<table>
<thead>
<tr>
<th>14.1. UN number:</th>
<th>1247</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2. UN proper shipping name:</td>
<td>METHYL METHACRYLATE MONOMER, STABILIZED</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es):</td>
<td>3</td>
</tr>
<tr>
<td>14.4. Packing group:</td>
<td>II</td>
</tr>
<tr>
<td>Hazard label:</td>
<td>3</td>
</tr>
<tr>
<td>Classification code:</td>
<td>F1</td>
</tr>
<tr>
<td>Limited quantity:</td>
<td>1 L</td>
</tr>
<tr>
<td>Other applicable information</td>
<td></td>
</tr>
</tbody>
</table>

Marine transport (IMDG)

<table>
<thead>
<tr>
<th>14.1. UN number:</th>
<th>1247</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2. UN proper shipping name:</td>
<td>METHYL METHACRYLATE MONOMER, STABILIZED</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es):</td>
<td>3</td>
</tr>
<tr>
<td>14.4. Packaging group:</td>
<td>II</td>
</tr>
<tr>
<td>Hazard label:</td>
<td>3</td>
</tr>
<tr>
<td>Limited quantity:</td>
<td>1 L</td>
</tr>
<tr>
<td>EmS:</td>
<td>F-E,S-D</td>
</tr>
<tr>
<td>Other applicable information (marine transport):</td>
<td></td>
</tr>
</tbody>
</table>

Other applicable information: | |
Air transport (ICAO)

14.1. UN number: 1247

14.2. UN proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED

14.3. Transport hazard class(es): 3

14.4. Packaging group: II

   Hazard label: 3

   Limited quantity Passenger: 1 L

   IATA-packing instructions - Passenger: 353
   IATA-max. quantity - Passenger: 5 L
   IATA-packing instructions - Cargo: 364
   IATA-max. quantity - Cargo: 60 L

14.5. Other applicable information (air transport) E2

   Passenger-LQ: Y341

14.6. Special precautions for user

   Warning: Flammable liquids.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

   Not applicable

Section 15. Regulatory Information

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

   National regulations:

   Water hazard class: Water hazard class I (Self-assessment): slightly hazardous for water.

15.2. Chemical Safety Assessment

   A Chemical Safety Assessment has not been carried out.

SECTION 16: Other Information

Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System of Classification and Labelling of Chemicals</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (division of the American Chemical Society)</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal concentration, 50 %</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal dose, 50 %</td>
</tr>
</tbody>
</table>

Relevant H- and EUH-phrases (number and full text)

Hazard statements

- H225  Highly flammable liquid and vapour.
- H315  Causes skin irritation.
- H317  May cause an allergic skin reaction.
- H332  Harmful by inhalation.
- H335  May cause respiratory irritation.
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.