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

1.1. Product identifier
Name of product: DURASPLINT monomer

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture
Creation of dental products.

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
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hazard categories:
Flammable liquid: Flam. Liq. 2
Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Irrit. 2
Respiratory/skin sensitization: Skin Sens. 1
Specific target organ toxicity – single exposure: STOT SE 3

Hazard Statements:
Highly flammable liquid and vapour.
Causes skin irritation.
May cause an allergic skin reaction.
Harmful if inhaled.
May cause respiratory irritation.

2.2. Label elements
Hazardous components which must be listed on the label
Methyl methacrylate

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
Material Safety Data Sheet according to (EC) 1907/2006

DURASPLINT monomer

Hazard statements

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapour.</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful by inhalation.</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
</tbody>
</table>

Precautionary statements

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P210</td>
<td>Keep away from heat/sparks/open flames/hot surfaces. – No smoking.</td>
</tr>
<tr>
<td>P240</td>
<td>Ground/bond container and receiving equipment.</td>
</tr>
<tr>
<td>P243</td>
<td>Take precautionary measures against static discharge.</td>
</tr>
<tr>
<td>P280</td>
<td>Wear protective gloves/protective clothing/eye protection/face protection.</td>
</tr>
</tbody>
</table>

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>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>201-297-1</td>
<td>methyl methacrylate</td>
<td></td>
<td>95 - &lt; 100 %</td>
</tr>
<tr>
<td></td>
<td>80-62-6</td>
<td></td>
<td>Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335</td>
<td></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

General Information: Remove contaminated, saturated clothing immediately. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

After inhalation: Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin: After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash ist before reuse. Medical treatment necessary.

After contact with eyes: After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion: Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water.

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
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
Carbon dioxide (CO2), Foam, Extinguishing powder.

Unsuitable extinguishing media
Water.

5.2. Special hazards arising from the substance or mixture
Flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters
Special protective equipment for fire fighters:
Wear a self contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information
Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions
Do not allow uncontrolled discharge of product into the environment. Danger of explosion.

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

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
If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion
Keep away from sources of ignition. – No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.
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.

7.3. Specific end use(s)
Creation of dental brace.

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>CAS-No.</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>Methyl methacrylate</td>
<td>50</td>
<td>208</td>
<td></td>
<td>TWA (8h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>416</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Substance</th>
<th>DNEL type</th>
<th>Exposure route</th>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>Methyl methacrylate</td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>208 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>17 mg/kg bw/day</td>
<td></td>
</tr>
</tbody>
</table>

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

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.

Protective and hygiene measures:
Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Respiratory protection
In case of inadequate ventilation wear respiratory protection.

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 eye/face protection.
**Material Safety Data Sheet** according to (EC) 1907/2006

**Tradename:**
DURASPLINT monomer

**Skin protection**
Flame-retardant protective clothing. Wear anti-static footwear and clothing.

### 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>colourless</td>
</tr>
<tr>
<td>Odour:</td>
<td>characteristic</td>
</tr>
</tbody>
</table>

| pH-value:               | not determined        |
| Melting point:          | -48.2 °C              |
| Initial boiling point and boiling range: | 100,3 °C |
| Flash point:            | 10 °C                 |

**Flammability**

| Solid:                  | not applicable        |
| Gas:                    | not applicable        |

| Flammable limits (lower) | 2,1 vol.%             |
| Flammable limits (upper) | 12,5 vol.%            |

**Ignition temperature:**

| Auto-ignition temperature | 430 °C                |

| Solid:                  | not applicable        |
| Gas:                    | not applicable        |

- **Decomposition temperature:** not determined
- **Oxidising properties:** not oxidizing
- **Vapour pressure:** 38.7 hP at 20 °C
- **Relative Density:** 0.94 g/cm³
- **Water solubility:** 15,9 g/L
- **Solubility in other solvents:** very soluble
- **Partition coefficient: n-octanol/water** 1.38
- **Viscosity / dynamic:** 0.63 mPa*s
- **Vapour density:** not determined
- **Evaporation rate:** not determined

#### 9.2. Other information

**Solid content:**

not determined

### 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

Keep away from sources of heat (e.g. hot surfaces), 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. Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity
Harmful by inhalation.

ATE (inhalative vapour) 15.52 mg/l

<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>&gt;5000 mg/kg</td>
<td>rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>rabbit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative vapour</td>
<td>LC50</td>
<td>29.8 mg/l</td>
<td>rat</td>
<td></td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Causes skin irritation.

Sensitising effects
May cause an allergic skin reaction. (Methyl methacrylate)

STOT-single exposure
May cause respiratory irritation. (Methyl methacrylate)

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Based on available data, the classification criteria are not met.

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

Additional toxicological information:
This mixture is classified as hazardous according to 1999/45/EC.

SECTION 12: Ecological Information

12.1. Toxicity
The product is not: Ecotoxic.

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical name</th>
<th>Aquatic toxicity</th>
<th>Method</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>Methylmethacrylat</td>
<td>Acute fish toxicity</td>
<td>LD50</td>
<td>&gt;79 mg/l</td>
<td>96</td>
<td></td>
<td><em>Onchorhyncus mykiss</em> (Rainbow trout)</td>
<td>OECD 203</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>&gt;110 mg/l</td>
<td>72</td>
<td></td>
<td><em>Selenastrum capricornutum</em></td>
<td>OECD 201</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>69 mg/l</td>
<td>48</td>
<td></td>
<td><em>Daphnia magna</em> (Big water flea)</td>
<td>OECD 202</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crusacea toxicity</td>
<td>NOEC</td>
<td>37 mg/l</td>
<td>21</td>
<td></td>
<td><em>Daphnia magna</em> (Big water flea)</td>
<td>OECD 202</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
The product has not been tested.
12.3. Bioaccumulative potential
The product has not been tested.

Partition coefficient n-octanol/water

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>Methyl methacrylate</td>
<td>1.38</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil
The product has not been tested.

12.5. Results of PBT and vPvB assessment
The product has not been tested.

12.6. Other adverse effects
No further relevant information available.

Further information
Avoid release to 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.

Contaminated packaging:
Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport Information

Land transport (ADR/RID)

14.1. UN number: 1247

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

14.3. Transport hazard class(es): 3

14.4. Packing group: II

Hazard label: 3
Classification code: F1
Limited quantity: 1 L
Transport category: 2
Hazard No: 339
Tunnel restriction code: D/E

Other applicable information (land transport)

Inland waterways transport (ADN)

14.1. UN number: 1247

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

14.3. Transport hazard class(es): 3

14.4. Packing group: II

Hazard label: 3
Classification code: F1
Limited quantity: 1 L

Other applicable information

Marine transport (IMDG)

14.1. UN number: 1247
Material Safety Data Sheet according to (EC) 1907/2006

Tradename: DURASPLINT monomer

<table>
<thead>
<tr>
<th>14.2. UN proper shipping name:</th>
<th>METHYL METHACRYLATE MONOMER, STABILIZED</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

Other applicable information (marine transport):

Air transport (ICAO)

<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 Passenger:</td>
<td>1 L</td>
</tr>
<tr>
<td>IATA-packing instructions - Passenger:</td>
<td>353</td>
</tr>
<tr>
<td>IATA-max. quantity - Passenger:</td>
<td>5 L</td>
</tr>
<tr>
<td>IATA-packing instructions - Cargo:</td>
<td>364</td>
</tr>
<tr>
<td>IATA-max. quantity - Cargo:</td>
<td>60 L</td>
</tr>
<tr>
<td>Other applicable information (air transport)</td>
<td>E2</td>
</tr>
<tr>
<td>Passenger-LQ:</td>
<td>Y341</td>
</tr>
</tbody>
</table>

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 regulatory informations:

Employment restrictions: Observe employment restrictions for young people.
Water hazard class: Water hazard class I: slightly water contaminating.
Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

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>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.