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

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

1.1. Product identifier
Name of product: SD-COMPOSITE Primer

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

1.3. Details of the supplier of the safety data sheet
Manufacturer / distributor
SCHU DENTAL GmbH
Am Burgberg 20
D-58642 Iserlohn
Tel. +49 (2374) 9288-0
Fax +49 (2374) 9288-90

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 lastest 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 compontens of labelling:
methyl methacrylate

Hazard statements

<table>
<thead>
<tr>
<th>Hazard statement</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>H335</td>
<td>May cause respiratory irritaion.</td>
</tr>
</tbody>
</table>

Precautionary statements

<table>
<thead>
<tr>
<th>Precautionary statement</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>P241</td>
<td>Use explosion-proof electrical/ventilating/lighting/equipment.</td>
</tr>
<tr>
<td>P303+P361+P353</td>
<td>IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with</td>
</tr>
</tbody>
</table>
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>80-62-6</td>
<td>methyl methacrylate</td>
<td>50 – 75 %</td>
</tr>
<tr>
<td></td>
<td>201-297-1</td>
<td>Classification according to Regulation (EC) No. 1272/2008 [CLP]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>205-521-9</td>
<td>n-Hexylmethacrylat</td>
<td>2.5 - 10 %</td>
</tr>
<tr>
<td></td>
<td>142-09-6</td>
<td></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

After inhalation:        Supply fresh air and to be sure call for a doctor.
After contact with skin: Wash immediately with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
After contact with eyes:  Rinse opened eye for several minutes under running water. Then consult a doctor.
After ingestion:          Rinse out mouth and then drink plenty of water Do not induce vomiting; call for medical help immediately.

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.
SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
Carbon dioxide, Fire-extinguishing powder, Foam, Water spray

Unsuitable extinguishing media
Water with full jet.

5.2. Special hazards arising from the substance or mixture
No further relevant information available.

5.3. Advice for firefighters
Special protective equipment for fire fighters:
No special measures required.

Additional information

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation. Wear protective equipment. Keep unprotected persons away. Keep away from ignition sources.

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 with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents.

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
Keep receptacles tightly sealed. Keep away from heat and direct sunlight. Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

Advice on protection against fire and explosion
Fumes can combine with air to form an explosive mixture. Keep ignition sources away – Do not smoke. Protect against electrostatic charges.

7.2. Conditions for safe storage, including any incompatibilities

Storage:
Requirements for storage rooms and vessels
Storage between 10 °C and 25 °C

Information about storage in one common storage facility:
Store away from foodstuffs.
Further information on storage conditions
Protect from exposure to the light. Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles.

Storage class:
Highly flammable

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

Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Short-term value</th>
<th>Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6 methyl methacrylate</td>
<td>416 mg/m³, 100 ppm</td>
<td>208 mg/m³, 50 ppm</td>
</tr>
</tbody>
</table>

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

8.2. Exposure controls

Personal protective equipment:
Protective and hygiene measures:
Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.

Respiratory protection
Not necessary if room is well-ventilated. Use suitable respiratory protective device when high concentrations are present. Short term filter device: Filter AX

Hand protection
Protective gloves
Material of gloves
Butyl rubber, BR

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.

Eye/face protection
Safety glasses

Limitation and supervision of exposure into the environment
No special precautions are necessary if used correctly.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Fluid</td>
</tr>
<tr>
<td>Colour</td>
<td>Clear</td>
</tr>
<tr>
<td>Odour</td>
<td>Ester-like</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not determined</td>
</tr>
</tbody>
</table>
Melting point/freezing point: Not determined
Initial boiling point and boiling range: 101 °C
Flash point: 10 °C
Ignition temperature: 430 °C
Self-igniting: Product is not self-igniting.
Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Lower explosion limit: 2.1 Vol %
Upper explosion limit: 12.5 Vol %
Vapour pressure: 47 hPa
Density: Not determined
Water solubility: Not miscible or difficult to mix
Partition coefficient: n-octanol/water Not determined
Viscosity Dynamic: Not determined
Viscosity Kinematic: Not determined
Solvent content: 0.0 %

9.2. Other information
No further relevant information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability
No decomposition if used according to specifications.

10.3. Possibility of hazardous reactions
Exothermic polymerization

10.4. Conditions to avoid
No further relevant information available.

10.5. Incompatible materials
In presence of radical formers (e. g. peroxides), deoxidizing substances, and/or heavy metal ions, polymerization with heat release is possible.

10.6. Hazardous decomposition products
No dangerous decomposition products known.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

<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>inhalative</td>
<td>LD50</td>
<td>7093 ppm / 4h</td>
<td>rat</td>
<td></td>
</tr>
<tr>
<td>142-09-6</td>
<td>n-Hexylmethacrylat</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>rat</td>
<td>OECD 401</td>
</tr>
</tbody>
</table>

Primary irritant effect:
Serious eye damage / irritation
On the skin: Irritant to skin and mucous membranes.
On the eye: Slightly irritating.

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 (carcinogenicity, mutagenicity and toxicity for reproduction)
Not applicable.

SECTION 12: Ecological Information

12.1. Toxicity

Aquatic toxicity:
No further relevant information available.

<table>
<thead>
<tr>
<th>CAS-Nr.</th>
<th>Bezeichnung</th>
<th>Method</th>
<th>Dosis</th>
<th>Spezies</th>
<th>Quelle</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>Methylmethacrylat</td>
<td>LC50</td>
<td>&gt;79 mg/l</td>
<td>Fisch</td>
<td>OECD 203 ISO 7346</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NOEC</td>
<td>40 mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expositionsduer: 96 h</td>
<td>449 V, C1 Oncorhynchus mykiss</td>
<td>EEC84</td>
<td></td>
</tr>
</tbody>
</table>

Toxicity to Micro-Organisms (MMA)
ECO: 100 mg/l starting inhibition of cell growth Spezies: Pseudomonas putida

12.2. Persistence and degradability
No further relevant information available.

Behaviour in environmental systems:
Components:
methyl methacrylate
Biodegradability: 30,7 %
Time: 28 d
Method: OECD 301 C
Valuation: difficult to decompose

12.3. Bioaccumulative potential
No further relevant information available.

12.4. Mobility in soil
No further relevant information available.

Additional ecological information:

General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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
After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste. Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue
07 01 04* other organic solvents, washing liquids and mother liquors

Uncleaned packaging:
Recommendation:
Disposal must be made according to official regulations.

SECTION 14: Transport Information

Land transport (ADR/RID)

14.1. UN number: 1247

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

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, mixture

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

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

14.3. Transport hazard class(es): 3

14.4. Packaging group: II

Hazard label: 3
Limited quantity: 1 L
EmS: F-E,S-D

Other applicable information (marine transport)

Air transport (ICAO)

14.1. UN number: 1247

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

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
   Other applicable information (air transport)
   Passenger-LQ: Y341

14.5. Environmental hazards
No

14.6. Special precautions for user
Warning: Flammable liquids.

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>Definition</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>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Hazard Category 2</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.
H319 Causes serious eye irritation.
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.