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

1.1. Product identifier

PermaCem 2.0

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

1.3. Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>DMG AMERICA LLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>242 South Dean Street</td>
</tr>
<tr>
<td>City, State, Zip Code:</td>
<td>Englewood, NJ. 07631</td>
</tr>
<tr>
<td>Telephone:</td>
<td>(800) 662-6383</td>
</tr>
<tr>
<td>email address:</td>
<td><a href="mailto:Info@dmg-america.com">Info@dmg-america.com</a></td>
</tr>
<tr>
<td>Website:</td>
<td><a href="http://www.dmg-america.com">www.dmg-america.com</a></td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

- Serious eye damage/eye irritation: Eye Dam. 1
- Respiratory/skin sensitization: Skin Sens. 1

Hazard Statements:
- May cause respiratory irritation.
- Causes serious eye damage.
- May cause an allergic skin reaction.

2.2. Label elements

Signal word: Danger
Pictograms: GHS02-GHS05-GHS07

Hazard statements
- H335 May cause respiratory irritation.
- H318 Causes serious eye damage.
- H317 May cause an allergic skin reaction.

Precautionary statements
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P302+P352 IF ON SKIN: Wash with plenty of water.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

SECTION 3: Composition/information on ingredients

3.2. Mixtures
Chemical characterization

<table>
<thead>
<tr>
<th>name</th>
<th>CAS</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDMA</td>
<td>n.a.</td>
<td>5 - 10</td>
</tr>
<tr>
<td>TEDMA</td>
<td>109-16-0</td>
<td>4 - 7</td>
</tr>
<tr>
<td>Bis-GMA</td>
<td>1565-94-2</td>
<td>&lt; 2.5</td>
</tr>
<tr>
<td>BPO</td>
<td>94-36-0</td>
<td>&lt; 2.5</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation
Move victim to fresh air. Put victim at rest and keep warm.

After contact with skin
After contact with skin, wash immediately with: Water and soap.

After contact with eyes
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion
Immediately get medical attention.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media
High power water jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Provide adequate ventilation. Wear suitable protective clothing.

6.2. Environmental precautions
Do not empty into drains or the aquatic environment.

6.3. Methods and material for containment and cleaning up
Collect mechanically. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Keep container tightly closed. Wear suitable protective clothing and gloves. Avoid contact with eyes.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep container tightly closed in a cool, well-ventilated place. Store only in original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
8.2. Exposure controls

Protective and hygiene measures
Take off immediately all contaminated clothing. When using do not eat or drink.

Eye/face protection
Tightly sealed safety glasses.

Hand protection
Tested protective gloves are to be worn: Suitable material: NBR (Nitrile rubber).

Respiratory protection
The following must be prevented: inhalation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state:</td>
<td>Paste</td>
</tr>
<tr>
<td>Colour:</td>
<td>yellow</td>
</tr>
<tr>
<td>Odour:</td>
<td>like: ester</td>
</tr>
</tbody>
</table>

Test method

Changes in the physical state
Initial boiling point and boiling range: > 180 °C
Zersetzungspunkt: > 180 °C
Flash point: 95 °C
Vapour pressure: 1 hPa (at 20 °C)
Density: 1.8 g/cm³
Water solubility: 60 g/L (at 20 °C)
Vapour density: > 1

SECTION 10: Stability and reactivity

10.4. Conditions to avoid
heat. Light. Decomposition takes place from temperatures above: 180 °C

10.5. Incompatible materials
Keep away from strong acids, leachates, heavy metal salts and reducing materials.

10.6. Hazardous decomposition products
Can be released in case of fire: Gas / vapours, irritant. (Acrylate., pungent)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Sensitising effects
May cause sensitization by skin contact.

Additional information on tests
Contains Methacrylic esters.: May produce an allergic reaction.
### SECTION 12: Ecological information

#### 12.2. Persistence and degradability

Do not empty into drains or the aquatic environment. Leakage into the environment must be prevented. Preparation not tested.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**Advice on disposal**

Can be burnt together with household waste in compliance with official regulations in contact with approved waste disposal companies and with authorities in charge.

Paste: Carry out a burning of hazardous waste according to official regulations.

**Waste disposal number of waste from residues/unused products**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>180106</td>
<td>WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care); wastes from natal care, diagnosis, treatment or prevention of disease in humans; chemicals consisting of or containing dangerous substances Classified as hazardous waste.</td>
</tr>
</tbody>
</table>

### SECTION 14: Transport information

Other applicable information

Not a hazardous material with respect to these transportation regulations.

### SECTION 15: Regulatory information

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

**National regulatory information**

Water contaminating class (D): 1 - slightly water contaminating

### SECTION 16: Other information

**Relevant H- and EUH-phrases (Number and full text)**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
</tbody>
</table>

**Further Information**

- The data for the hazardous ingredients were taken respectively from the last version 4/14/2016 of the sub-contractor's safety data sheet.