DENTSPLY Maillefer

Safety Data Sheet

Date Issued: 10/14/14
Document Number: SDSAH26LR
Date Revised: 
Revision Number: 0

1. PRODUCT IDENTIFICATION

Trade Name (as labeled): DENTSPLY AH 26 Liquid Resin
Chemical Name/Classification: BISPHENOL A/ EPICHLOROHYDRIN RESIN
Product Identifier (Part/Item Number): 667002
U.N. Number: 3082
U.N. Dangerous Goods Classification: 9
Recommended Use: Root canal filling material
Restrictions on Use: For use by Dental Professionals only
Distributed by: DENTSPLY Maillefer
Distributors Address: 608 Rolling Hills Dr., Johnson City, TN 37604
Distributor Telephone Number: 1-800-992-7767 (Product Information)
Emergency Contact Telephone Number: Chemtrec (800) -262-8200
Email address: Chemtrec@chemtrec.com

2. HAZARD(s) IDENTIFICATION

Hazard/Danger Classification:

<table>
<thead>
<tr>
<th>Health</th>
<th>Environmental</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>R36/38, R43, S23, S25, S26, S37, S39, S46</td>
<td>R51/53, S29, S35, S40, S56, S57, S61</td>
<td>NA</td>
</tr>
</tbody>
</table>

Associated Hazards:

<table>
<thead>
<tr>
<th>Hazard Statements</th>
<th>Precautionary Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315, H320, H411</td>
<td>P260, P273, P332+313</td>
</tr>
</tbody>
</table>
EU Classification: Xi, N

EU Risk (R) and Safety (S) Phrases: R36/38, R43, R51/53; S23, S25, S26, S37, S39, S46, S29, S35, S40, S56, S57, S61

Refer to Section 16 for the full text of the EU Classifications and R Phrases.

### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>C.A.S. #</th>
<th>IUPAC Name</th>
<th>Substance Classification</th>
<th>WT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>BISPHENOL A/ EPICHLOROHYDRIN RESIN</td>
<td>25068-38-6</td>
<td>bisphenol A/epichlorohydrin resin</td>
<td>Xi; R36/38, R4- N; R51-53</td>
<td>50-100%</td>
</tr>
</tbody>
</table>

Refer to Section 16 for the full text of the GHS and H phrases and EU Classifications and R Phrases.

### 4. FIRST-AID MEASURES

<table>
<thead>
<tr>
<th>Routes of Exposure</th>
<th>First Aid Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye</td>
<td>Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</td>
</tr>
<tr>
<td>Skin</td>
<td>Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>If dust is inhaled, remove from contaminated area. Encourage patient to blow nose to ensure clear breathing passages. Ask patient to rinse mouth with water but to not drink water. Seek immediate medical attention.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</td>
</tr>
<tr>
<td><strong>Most important symptoms of exposure</strong></td>
<td><strong>Not Specified</strong></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td><strong>NA</strong></td>
</tr>
</tbody>
</table>

**Note to Physicians (Treatment, Testing, and Monitoring)** Treat symptomatically
5. FIRE-FIGHTING MEASURES

<table>
<thead>
<tr>
<th>Suitable Extinguishing Media:</th>
<th>Foam, Dry chemical powder, BCF (where regulations permit), Carbon dioxide.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Fighting Procedures:</td>
<td>Alert Fire Brigade and tell them location and nature of hazard.</td>
</tr>
<tr>
<td></td>
<td>Wear full body protective clothing with breathing apparatus.</td>
</tr>
<tr>
<td></td>
<td>Prevent, by any means available, spillage from entering drains or water course.</td>
</tr>
<tr>
<td></td>
<td>Use water delivered as a fine spray to control fire and cool adjacent area</td>
</tr>
<tr>
<td>Specific Hazards Arising from the Chemical:</td>
<td>Combustible.</td>
</tr>
<tr>
<td></td>
<td>Slight fire hazard when exposed to heat or flame.</td>
</tr>
<tr>
<td></td>
<td>Heating may cause expansion or decomposition leading to violent rupture of containers.</td>
</tr>
<tr>
<td></td>
<td>On combustion, may emit toxic fumes of carbon monoxide (CO).</td>
</tr>
<tr>
<td>Precautions for Fire Fighters:</td>
<td>Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result</td>
</tr>
</tbody>
</table>

### Recommended Protective Equipment for Fire Fighters:

<table>
<thead>
<tr>
<th>EYES/FACE</th>
<th>SKIN</th>
<th>RESPIRATORY</th>
<th>THERMAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Eyes/Face Icon" /></td>
<td><img src="image" alt="Skin Icon" /></td>
<td><img src="image" alt="Respiratory Icon" /></td>
<td><img src="image" alt="Thermal Icon" /></td>
</tr>
</tbody>
</table>

6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, PPE and Emergency Procedures:** Not Specified

**Environmental Precautions:** Clean up all spills immediately. Avoid breathing vapors and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.

**Methods and Materials for Containment and Clean-up:** Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard.

### Recommended Personal Protective Equipment for Containment and Clean-up:

<table>
<thead>
<tr>
<th>EYES/FACE</th>
<th>SKIN</th>
<th>RESPIRATORY</th>
<th>THERMAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Eyes/Face Icon" /></td>
<td><img src="image" alt="Skin Icon" /></td>
<td><img src="image" alt="Respiratory Icon" /></td>
<td><img src="image" alt="Thermal Icon" /></td>
</tr>
</tbody>
</table>

7. HANDLING AND STORAGE
### Precautions for Safe Handling
Avoid all personal contact, including inhalation; Wear protective clothing when risk of exposure occurs; Use in a well-ventilated area; Prevent concentration in hollows and sumps.

### Conditions for Safe Storage
Store in original containers; Keep containers securely sealed; Store in a cool, dry, well-ventilated area; Store away from incompatible materials and foodstuff containers. Metal can or drum packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Occupational Exposure Limits
Not Available

### Biological Exposure Limits
Not Specified

### Appropriate Engineering Controls:
Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:
- Process controls which involve changing the way a job activity or process is done to reduce the risk.
- Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

### Individual Protection Measures (PPE)

#### Specific Eye/face Protection:
Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

#### Specific Skin Protection:
When handling liquid-grade epoxy resins wear chemically protective gloves (e.g. nitrile or nitrile-butatoluene rubber), boots and aprons. DO NOT use cotton or leather (which absorb and concentrate the resin), polyvinyl chloride, rubber or polyethylene gloves (which absorb the resin). DO NOT use barrier creams containing emulsified fats and oils as these may absorb the resin; silicone-based barrier creams should be reviewed prior to use.

**NOTE:** The material may produce skin sensitization in predisposed individuals.

#### Specific Respiratory Protection
Not Specified

#### Specific Thermal Hazards
Not Available

### Recommended Personal Protective Equipment

<table>
<thead>
<tr>
<th>EYES/FACE</th>
<th>SKIN</th>
<th>RESPIRATORY</th>
<th>THERMAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Eye Protection" /></td>
<td><img src="image" alt="Skin Protection" /></td>
<td><img src="image" alt="Respiratory Protection" /></td>
<td><img src="image" alt="Thermal Protection" /></td>
</tr>
</tbody>
</table>

Environmental Exposure Controls: Not Specified

### General Hygiene Considerations and Work Practices
Not Specified

### Protective Measures During Repair and Maintenance of Contaminated Equipment
Not Specified
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Light yellow liquid with a characteristic odor; does not mix with water.</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>Not Available</td>
</tr>
<tr>
<td>Odor</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not Available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not Available</td>
</tr>
<tr>
<td>pH</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.15-1.20</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Immiscible</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>200 °C</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flash point</td>
<td>200 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not Available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>&gt;200</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not Available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not Available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: See section 7

Chemical Stability: Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerization will not occur.

Possibility of Hazardous Reactions: See section 7

Conditions to Avoid: See section 7

Incompatible materials: See section 7

Hazardous Decomposition Products: See section 5

11. TOXICOLOGICAL INFORMATION

Signs and Symptoms of Overexposure: See Below
**Emergency Overview:** Seek Medical Attention

<table>
<thead>
<tr>
<th>Likely Routes of Exposure</th>
<th>Signs and Symptoms</th>
<th>Single, Repeated, or Lifetime Exposure</th>
<th>Severity (Mild, Moderate, Severe)</th>
<th>Acute and Chronic Health Effect(s)</th>
<th>Target Organ(s)</th>
<th>LD50 Testing Data (as applicable)</th>
<th>LC50 Testing Data (as applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye:</td>
<td>May cause eye irritation</td>
<td>May cause inflammation characterized by a temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration</td>
<td>Yes</td>
<td>NA</td>
<td>Eye</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Skin:</td>
<td>May damage the health of the individual; systemic effects may result following absorption</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Skin</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Inhalation:</td>
<td>Not normally a hazard due to non-volatile nature of product</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Air ways</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Ingestion:</td>
<td>NOT classified as &quot;harmful by ingestion</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Other:</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**Medical Conditions Aggravated by Exposure:** Pulmonary sensitization, resulting in hyperactive airway dysfunction and pulmonary allergy may be accompanied by fatigue, malaise and aching. Significant symptoms of exposure may persist for extended periods, even after exposure ceases. Symptoms can be activated by a variety of nonspecific environmental stimuli such as automobile exhaust, perfumes and passive smoking.

**Carcinogenicity:** Not Known to be Carcinogenic

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**12. ECOLOGICAL INFORMATION**

**Toxicity:** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. DO NOT discharge into sewer or waterways.

**Persistence and Degradability:** Not Available

**Bio-accumulative Potential:** Not Available
13. DISPOSAL CONSIDERATIONS

**Regulations:** Dispose in accordance with current local, state and federal regulations. Keep spills out of sewers and open bodies of water.

**Properties (Physical/Chemical) Affecting Disposal:** None Specified

**Waste Treatment Recommendations:** Consult manufacturer for recycling options and recycle where possible. Consult State Land Waste Management Authority for disposal. Incinerate residue at an approved site. Recycle containers if possible, or dispose of in an authorized landfill.

14. TRANSPORT INFORMATION

**UN Identification Number:** 3082

**UN Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains bisphenol A/epichlorohydrin resin)

**Transport hazard class(es):** 9

**Packing Group:** III

**Special precautions for user:** Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in; (a) packaging; b) IBCs; or (c) any other receptacle not exceeding 500 kg (L).

15. REGULATORY INFORMATION

**U.S. Federal Regulations**

- **Comprehensive Environmental Response and Liability Act of 1980 (CERCLA):** Not Specified
- **Toxic Substances Control Act (TSCA):** Not Specified
- **Clean Water Act (CWA):** Not Specified
DENTSPLY Maillefer

Clean Air Act (CAA): Not Specified
Superfund Amendments and Reauthorization Act (SARA) Title III Information: Not Specified
SARA Section 311/312 (40 CFR 370) Hazard Categories: Not Specified

<table>
<thead>
<tr>
<th>Immediate Hazard:</th>
<th>NA</th>
<th>Pressure Hazard:</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delayed Hazard:</td>
<td>NA</td>
<td>Reactivity Hazard:</td>
<td>NA</td>
</tr>
<tr>
<td>Fire Hazard:</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):

<table>
<thead>
<tr>
<th>Components</th>
<th>C.A.S. #</th>
<th>WT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

State Regulations

California: This product contains the following chemicals(s) known to the State of California to cause cancer, birth defects or reproductive harm:

<table>
<thead>
<tr>
<th>Components</th>
<th>C.A.S. #</th>
<th>WT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

International Regulations

Canadian Environmental Protection Act: NA
Canadian Workplace Hazardous Materials Information System (WHMIS): NA
European Inventory of Existing Chemicals (EINECS): 500-033-5

16. OTHER INFORMATION

Full text of Classification abbreviations used in Section 2 and 3:
R36/38 Irritating to eyes and skin.
R51/53 Toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.
R43 May cause sensitization by skin contact.
S23 Do not breathe gas/fumes/vapor/spray.
S24 Avoid contact with skin.
S25 Avoid contact with eyes.
S26 In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
S29 Do not empty into drains.
S35 This material and its container must be disposed of in a safe way.
S37 Wear suitable gloves.
S39 Wear eye/face protection.
S40 To clean the floor and all objects contaminated by this material, use water and detergent.
S46 If swallowed, seek medical advice immediately and show this container or label.
S56 Dispose of this material and its container at hazardous or special waste collection point.
S57 Use appropriate container to avoid environmental contamination.
S61 Avoid release to the environment. Refer to special instructions/Safety data.
H315 Causes skin irritation
H320 Causes eye irritation
H411 Toxic to aquatic life with long lasting effects
P260 Do not breathe dust/fume/gas/mist/vapors/spray
P273 Avoid release to the environment
P332+313 If skin irritation occurs: Get medical advice/attention

Date of SDS Preparation/Revision: 10/14/2014
Data Sources: Manufacturer