### SECTION 1: Identification

#### 1. Identification

- **Product form**: Mixture
- **Product name**: Fortify Plus / Modeling Resin

#### 1.2. Recommended use and restrictions on use

- **Use of the substance/mixture**: For RX only

#### 1.3. Supplier

**Manufacturer**
Bisco, Inc.
1100 W. Irving Park Rd.
Schaumburg, IL 60193
T 1.847.534.6000 - F 1.847.891.5049
sales@bisco.com - www.bisco.com

**1.4. Emergency telephone number**

- **Emergency number**: CHEMTREC - 24-Hour Hazmat Emergency Communications Center
  Domestic: 1-800-424-9300 Outside the U.S.: 1-703-527-3887, collect calls accepted

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

**GHS-US classification**
- **Flammable liquids Category 4**: H227 - Combustible liquid
- **Skin corrosion/irritation Category 2**: H315 - Causes skin irritation
- **Serious eye damage/eye irritation Category 2**: H319 - Causes serious eye irritation
- **Specific target organ toxicity (single exposure) Category 3**: H336 - May cause drowsiness or dizziness

Full text of H statements: see section 16

#### 2.2. GHS Label elements, including precautionary statements

**GHS-US labeling**

**Hazard pictograms (GHS-US)**: ![](image)

**Hazard statements (GHS-US)**: H227 - Combustible liquid
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H336 - May cause drowsiness or dizziness

**Precautionary statements (GHS-US)**: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- P261 - Avoid breathing vapors
- P264 - Wash hands thoroughly after handling
- P271 - Use only outdoors or in a well-ventilated area
- P280 - Wear eye protection, face protection, protective gloves
- P302+P352 - If on skin: Wash with plenty of Wash skin with soap and water
- P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
- P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P312 - Call a POISON CENTER, a doctor if you feel unwell
- P321 - Specific treatment (see First aid measures on this label)
- P333+P313 - If skin irritation occurs: Get medical advice/attention
- P334+P313 - If eye irritation persists: Get medical advice/attention
- P362+P364 - Take off contaminated clothing and wash it before reuse
- P370+P378 - In case of fire: Use dry sand, extinguishing powder, foam, carbon dioxide (CO2) to extinguish
- P403+P233 - Store in a well-ventilated place. Keep container tightly closed
Fortify Plus / Modeling Resin
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.3. Other hazards which do not result in classification
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urethane Dimethacrylate</td>
<td>(CAS-No.) Proprietary</td>
<td>10 - 30</td>
<td>Skin Irr. 2, H315  Eye Irr. 2B, H320  STOT SE 3, H336</td>
</tr>
<tr>
<td>Tetrahydrofurfuryl Methacrylate</td>
<td>(CAS-No.) 2455-24-5</td>
<td>1 - 5</td>
<td>Flam. Liq. 4, H227  Skin Irr. 2, H315  Eye Irr. 2, H319  STOT SE 3, H335  Aquatic Acute 3, H402</td>
</tr>
<tr>
<td>Bisphenol A Dimethacrylate</td>
<td>(CAS-No.) 3253-39-2</td>
<td>1 - 5</td>
<td>Skin Irr. 2, H315  Eye Irr. 2, H319  STOT SE 3, H335</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures
First-aid measures general: Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)
Symptoms/effects: May cause drowsiness or dizziness.
Symptoms/effects after skin contact: Irritation.
Symptoms/effects after eye contact: Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary
Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

5.2. Specific hazards arising from the chemical
Fire hazard: Combustible liquid.
Reactivity: The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters
Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Emergency procedures: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing mist, vapors. Avoid contact with skin and eyes.
6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing mist, vapors. Avoid contact with skin and eyes.

Hygiene measures: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Control parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urethane Dimethacrylate (Proprietary)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Tetrahydrofurfuryl Methacrylate (2455-24-5)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Bisphenol A Dimethacrylate (3253-39-2)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection: Protective gloves

Eye protection: Protective goggles

Skin and body protection: Wear suitable protective clothing

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Flowable paste.</td>
</tr>
<tr>
<td>Color</td>
<td>Pale yellow</td>
</tr>
</tbody>
</table>
Odor: Acrylic
Odor threshold: No data available
pH: No data available
Melting point: Not applicable
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Relative evaporation rate (butyl acetate=1): No data available
Flammability (solid, gas): Not applicable.
Vapor pressure: No data available
Relative vapor density at 20 °C: No data available
Relative density: No data available
Solubility: No data available
Log Pow: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosion limits: No data available
Explosive properties: No data available
Oxidizing properties: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Not classified

Urethane Dimethacrylate (Proprietary)

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>N/A</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>N/A</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>N/A</td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Bisphenol A Dimethacrylate (3253-39-2)

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 5000 mg/kg (Rat)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/irritation: Causes serious eye irritation.
Respiratory or skin sensitization: Not classified
Fortify Plus / Modeling Resin
Safety Data Sheet

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Urethane Dimethacrylate (Proprietary)

| IARC group | 4 - Probably not carcinogenic to humans |

Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : May cause drowsiness or dizziness.

Urethane Dimethacrylate (Proprietary)

| LOAEL (oral,rat) | N/A mg/kg body weight |
| LOAEL (dermal,rat/rabbit) | N/A mg/kg body weight |
| LOAEC (inhalation,rat,gas) | N/A ppmV/4h |
| LOAEC (inhalation,rat, vapour) | N/A mg/l/4h |
| LOAEC (inhalation,rat,dust/mist/fume) | N/A mg/l/4h |

Specific target organ toxicity – repeated exposure : Not classified

Urethane Dimethacrylate (Proprietary)

| LOAEL (oral, rat, 90 days) | N/A mg/kg bodyweight/day |
| LOAEL (dermal, rat/rabbit, 90 days) | N/A mg/kg bodyweight/day |
| LOAEC (inhalation, rat,gas, 90 days) | N/A ppmV/6h/day |
| LOAEC (inhalation, rat,vapour, 90 days) | N/A mg/l/6h/day |
| LOAEC (inhalation, rat, dust/mist/fume, 90 days) | N/A mg/l/6h/day |

Aspiration hazard : Not classified
Symptoms/effects : May cause drowsiness or dizziness.
Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Tetrahydrofurfuryl Methacrylate (2455-24-5)

| LC50 fish 1 | 34.7 mg/l (LC50; 96 h; Pimephales promelas) |

12.2. Persistence and degradability

Tetrahydrofurfuryl Methacrylate (2455-24-5)

Persistence and degradability : Biodegradability in water: no data available. No (test)data on mobility of the substance available.

Bisphenol A Dimethacrylate (3253-39-2)

Persistence and degradability : Biodegradability in soil: no data available.

12.3. Bioaccumulative potential

Tetrahydrofurfuryl Methacrylate (2455-24-5)

Log Pow : 1.3
Bioaccumulative potential : Low potential for bioaccumulation (Log Kow < 4).

Bisphenol A Dimethacrylate (3253-39-2)

Log Pow : 5.3 (QSAR)
Bioaccumulative potential : No bioaccumulation data available.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the global warming: No known effects from this product.
GWPmix comment: No known effects from this product.

SECTION 13: Disposal considerations
13.1. Disposal methods
Waste treatment methods: Dispose of contents/container in accordance with licensed collector’s sorting instructions.

SECTION 14: Transport information
Department of Transportation (DOT)
In accordance with DOT
Other information: No supplementary information available.

TDG
Transport by sea
Air transport

SECTION 15: Regulatory information
15.1. US Federal regulations
Tetrahydrofurfuryl Methacrylate (2455-24-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations
CANADA
No additional information available
EU-Regulations
No additional information available
National regulations
No additional information available

15.3. US State regulations
No additional information available

SECTION 16: Other information
Revision date: 01/29/2018
Full text of H-phrases:

<table>
<thead>
<tr>
<th>H-number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H227</td>
<td>Combustible liquid</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H320</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness</td>
</tr>
<tr>
<td>H402</td>
<td>Harmful to aquatic life</td>
</tr>
</tbody>
</table>
This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.