SAFETY DATA SHEET

Product:  590
Revision Date:  6/01/2015

1. MATERIAL IDENTIFICATION

Product Name:  Crystalbond 590
Product Description:  Brown, Solid Stick
Product Use:  Temporary Mounting Adhesive
Manufacturer:  Aremco Products, Inc.
707-B Executive Blvd.
Valley Cottage, NY 10989
Telephone:  845-268-0039
Emergency Phone:  845-268-0039 or Infotrac (24/7) 800-535-5053

2. HAZARDS IDENTIFICATION

GHS Classification:
Non-Hazardous

GHS Label Elements:
None

GHS Signal Word:
None

GHS Hazard Determining Component:
None

GHS Hazard Statements for Health Hazards:
None

GHS Precautionary Statements - Prevention:
None

GHS Precautionary Statements - Response:
None

GHS Storage/Disposal:
None

3. COMPOSITION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Concentration</th>
<th>GHS Product Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium Sulfate</td>
<td>7727-43-7</td>
<td>231-784-4</td>
<td>20.0-40.0%</td>
<td>None</td>
</tr>
<tr>
<td>Shellac</td>
<td>9000-59-3</td>
<td>232-549-9</td>
<td>60.0-80.0%</td>
<td>None</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Eye Exposure:
Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention, preferably with an ophthalmologist. If a physician is not immediately available, eye irrigation should be continued for an additional 15 minutes. Hot fluid product: Cool burns with plenty of low-pressure water and get immediate medical attention.
**Skin Exposure:**
Immediately wipe excess material off skin with a dry cloth then wash with plenty of soap and water for at least 5 minutes. Seek medical attention if irritation develops or persists. Remove contaminated clothing and shoes and clean thoroughly before re-use. Hot Fluid: Immediately cool skin with water and cold packs for at least 15 minutes. Do not put ice directly on skin. Do not attempt to remove solidified wax from the skin as severe tissue damage may result. Get immediate medical attention.

**Inhalation:**
Remove from immediate source of exposure and assure that victim is breathing. If not breathing, administer cardio-pulmonary resuscitation (CPR). If breathing is difficult, administer oxygen if available. Seek medical attention.

**Ingestion:**
If swallowed, do not induce vomiting. If victim is conscious and alert, give 1-2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention immediately. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

**Medical Conditions Possibly Aggravated by Exposure:**
Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

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**5. FIRE FIGHTING MEASURES**

**Flash Point:** Not determined.

**Flammable Limits:** Not determined.

**Extinguishing Media:** Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

**Special Fire Fighting Procedures:** Firefighters should wear NIOSH/MSHA approved positive pressure breathing apparatus with full face-piece and full chemical resistant protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

**Unusual Fire and Explosion Hazards:** None.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal Protection:** Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots. Use NIOSH approved respirator where mist occurs.

**Spill Cleanup:** Avoid breathing dust. Use vacuuming or sweeping compound for cleanup. Do not dry sweep or use methods that increase dusting. Prevent entry into sewers and waterways. Flush area with water to complete cleanup.

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**7. HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes, skin and clothing. Avoid breathing dust and vapors generated when melted. Keep container closed. Promptly clean residue from closures with cloth dampened with water. Promptly clean up spills. Do not empty bags directly into vessels containing combustible vapors.

**Storage:** Store in an area that is cool, dry, and well ventilated. Water contamination should be avoided. Store in clean plastic or steel containers. Keep away from heat, sparks and open flame.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>TLV (mg/m³)</th>
<th>PEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shellac</td>
<td>9000-59-3</td>
<td>232-549-9</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Barium Sulfate</td>
<td>7727-43-7</td>
<td>231-784-4</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

**Engineering Controls:** Use with adequate ventilation. Keep containers closed. Safety shower and eyewash fountain should be within direct access.

**Respiratory Protection:** Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated, appropriate personal protection equipment and local ventilation controls must be employed. If exposure limits are exceeded and local ventilation is unavailable, a supplied-air respirator or a self-contained NIOSH-approved dust and mist respirator is required.

**Skin Protection:**
Wear body-covering protective clothing and gloves.

**Eye Protection:**
Wear chemical goggles.
9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Solid Stick  
**Color:** Brown  
**Odor:** Odor at Room Temperature  
**Specific Gravity, g/cc:** 2.3  
**Water Solubility:** Insoluble (soluble in alcohols and acetone)  
**Melting Point:** 80-120 °C  
**Thermal Decomposition:** > 160 °C  
**VOC Content, g/l:** N/D

10. STABILITY AND REACTIVITY

**Chemical Stability:** This material is stable under all conditions of use and storage.  
**Conditions to Avoid:** Avoid excessive heat for prolonged periods of time.  
**Materials to Avoid:** None.  
**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide may be formed on burning. Heating in air may produce irritating acetaldehydes and acetic acid.  
**Hazardous Polymerization:** Will not occur.

11. TOXICOLOGICAL INFORMATION

**Health Warning:** No specific health warning is noted. Hot fumes or dust may irritate respiratory system.

12. ECOLOGICAL INFORMATION

**Aquatic Toxicity:** Slightly hazardous to water.  
**Ecotoxic Effects:** This polymer is expected to be of low toxicity.  
**Environmental Hazards:** This polymer is expected to be of low toxicity.  
**Biological Decomposition:** This polymer is completely biodegradable under defined conditions.

13. DISPOSAL CONSIDERATIONS

**Disposal Method:** Dispose in accordance with federal, state and local regulations and permits.

14. TRANSPORTATION INFORMATION

**DOT UN Status:** The material is not a regulated hazardous material for transportation.

15. REGULATORY INFORMATION

**U.S. Federal Regulations**

**TSCA:** All ingredients of this material are listed on the TSCA inventory.  
**CERCLA:** No CERCLA reportable quantity has been established for this material.  
**SARA Title III**  
**Sections 302, 304, 313:** This product does not contain any substances reportable under these sections.
<table>
<thead>
<tr>
<th>Hazard Classes</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactivity Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Immediate Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Delayed Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>International Inventory Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada (DSL)</td>
</tr>
<tr>
<td>Europe (EINECS/ELINCS)</td>
</tr>
<tr>
<td>Australia (AICS)</td>
</tr>
<tr>
<td>Japan (MITI)</td>
</tr>
<tr>
<td>South Korea (KECL)</td>
</tr>
</tbody>
</table>

### 16. OTHER INFORMATION

#### NFPA Ratings (scale 0 – 4)
- Health: 1
- Flammability: 1
- Reactivity: 0
- Personal Protection: G

#### HMIS Ratings (scale 0 – 4)
- Health: 1
- Flammability: 1
- Reactivity: 0
- Personal Protection: G

### Key Legend Information

- **ACGIH**: American Conference of Governmental Industrial Hygienists
- **ARD**: International Agency for Research on Cancer
- **CAS**: Chemical Abstract Service
- **CERCLA**: Comprehensive Environmental Response, Compensation & Liability Act
- **DSL**: Domestic Substance List
- **HMIS**: Hazardous Materials Identification System
- **ND**: Not Determined
- **NE**: Not Established
- **NFPA**: National Fire Protection Association
- **NIOSH**: National Institute for Occupational Safety & Health
- **NTP**: National Toxicology Program
- **OSHA**: Occupational Safety and Health Administration
- **PEL**: Permissible Exposure Limit
- **RTECS**: Registry of Toxic Effects of Chemical Substances
- **SARA**: Superfund Amendments & Reauthorization Act
- **SARA Title III**: Emergency Planning & Community Right to Know Act
- **SARA Section 302**: Extremely Hazardous Substances
- **SARA Section 304**: Emergency Release
- **SARA Section 311**: MSDS/List of Chemicals & Hazardous Inventory
- **SARA Section 312**: Emergency & Hazardous Inventory
- **SARA Section 313**: Toxic Chemicals & Release Reporting
- **STEL**: Short Term Exposure Limit
- **TLV**: Threshold Limit Value
- **TWA**: Time Weighted Average

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