1. MATERIAL IDENTIFICATION

Product Name: Crystalbond 509-S Stripper
Product Description: Transparent Liquid, Slight Ammonia Odor
Product Use: Adhesive Solvent
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:
- Flammable Liquids: Category 4
- Acute Toxicity, Dermal: Category 4
- Acute Toxicity, Inhalation: Category 4
- Reproductive Toxicity: Category 1B
- Specific Target Organ Toxicity, Single Exposure: Category 1 (Liver)
- Specific Target Organ Toxicity, Single Exposure: Category 3 Narcotic Effects
- Specific Target Organ Toxicity, Repeated Exposure: Category 2 (Respiratory System)

GHS Symbol:

GHS Signal Word:
Danger

GHS Hazard Determining Component:
Dimethyl Acetamide

GHS Hazard Statements for Health Hazards:
- H227: Combustible liquid
- H312: Harmful in contact with skin
- H332: Harmful if inhaled
- H336: May cause drowsiness or dizziness
- H360: May damage fertility or the unborn child
- H370: Causes damage to liver
- H373: May cause damage to respiratory system

GHS Precautionary Statements - Prevention:
- P202: Do not handle until all safety precautions have been read and understood
- P210: Keep away from flames and hot surfaces. No smoking.
- P260: Do not breath vapors
- P264: Wash arms and face thoroughly after handling
- P270: Do not eat, drink or smoke when using this product
- P271: Use only in a well-ventilated area
- P280: Wear protective gloves. Wear eye and face protection.
- P281: Use personal protective equipment as required.

GHS Precautionary Statements - Response:
- P302+P352: IF ON SKIN: Wash with plenty of soap and water
- P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P308+P313: If exposed or concerned, get medical advice/attention.
- P312: Call a Poison Center or doctor if you feel unwell
- P363: Wash contaminated clothing before reuse
3. COMPOSITION

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Concentration</th>
<th>GHS Product Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Acetamide</td>
<td>127-19-5</td>
<td>204-826-4</td>
<td>&gt; 90.0 %</td>
<td>H314 Skin Corrosion/Irritation, Cat 1B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H318 Eye Damage/Irritation, Cat 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H335 STOT, SE; Respiratory Tract Irritation, Cat 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H290 Metal Corrosion, Cat 1</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.

**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.

**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.

5. FIRE FIGHTING MEASURES

**Flash Point:**
> 160 °F (320 °C) Closed Cup

**Auto-Ignition Temperature:**
Not determined.

**Flammable Limits:**
Not determined.

**Upper Flame Limit (volume % in air):**
11.5 @ 160 °C (Dimethylacetamide)

**Upper Flame Limit (volume % in air):**
1.8 @ 100 °C (Dimethylacetamide)

**Extinguishing Media:**
Use dry chemical, foam, carbon dioxide, or water spray.

**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:**
Vapors can travel along surfaces to distant ignition sources and flash back. Vapors can spread along ground and collect in low confined areas. As with any organic material, contact with strong oxidizers may cause fire or explosion.

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:**
Ventilate area. Remove sources of ignition. Isolate hazard area. Absorb spill with inert material (e.g. vermiculite, sand, earth or non-combustible absorbent material) and place in chemical waste container. Rinse the spill area with water. Prevent entry into sewers and waterways.
7. HANDLING AND STORAGE

**Handling:**
Keep away from heat, sparks and flames. Keep container tightly closed when not in use. Avoid contact with skin, eyes and on clothing. Avoid breathing vapor or mist. Remove contaminated clothing and wash thoroughly after handling. Promptly clean residue from closures with cloth dampened with water. Promptly clean up spills.

**Storage:**
Keep away from sources of ignition. Store in an area that is cool, dry, and well ventilated. Store in clean plastic containers. Residual vapors might explode on ignition; do not apply heat, cut, drill, and grind or weld on or near this container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>TLV (mg/m³)</th>
<th>PEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Acetamide</td>
<td>127-19-5</td>
<td>204-826-4</td>
<td>10 ppm (skin)</td>
<td>10 ppm (skin)</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 or mist 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 rubber gloves and body-covering protective clothing to prevent skin exposure.

**Eye Protection:**
Wear appropriate safety glasses or chemical splash goggles and face shield where contact due to splashing or spraying is possible.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance:** Liquid
- **Color:** Transparent
- **Odor:** Slight Ammonia
- **pH:** Not Determined
- **Specific Gravity, g/cc:** 0.96-1.03 @ 68 °F
- **Water Solubility:** Soluble
- **Boiling Point:** 329 °F
- **Melting Point:** -4 °F
- **Vapor Pressure:** 3.5 @ 77 °F
- **Vapor Density (air=1):** 2.5
- **Evaporation Rate:** 0.17 (compared to Butyl Acetate)
- **Percent Volatiles:** 0.00%

10. STABILITY AND REACTIVITY

**Chemical Stability:** This material is stable under all conditions of use and storage.

**Conditions to Avoid:** Avoid flame or other sources of ignition and incompatibles.

**Materials to Avoid:** Strong acids, strong oxidizers, strong reducing agents.

**Hazardous Decomposition Products:** Burning may produce nitrogen oxides, carbon monoxide, carbon dioxide, and dimethylamine.

**Hazardous Polymerization:** Will not occur.

11. TOXICOLOGICAL INFORMATION

**Information on Likely Routes of Exposure:**

- **Inhalation:** May cause drowsiness or dizziness. Harmful if inhaled.
- **Skin Contact:** Prolonged skin contact may cause temporary irritation. Harmful in contact with skin.
- **Eye Contact:** Direct contact with eyes may cause temporary irritation.
- **Ingestion:** Ingestion may cause dizziness, nausea and vomiting.

**Information on Acute Toxicity:**

- **Dimethylacetamide:**
  - $LD_{50}$ (oral-rat): 4300 mg/kg
  - $LD_{50}$ (dermal-rabbit): 2200 mg/kg
  - $LD_{50}$ (inhalation-rat): 8.81 mg/L / 1 hr
Acute Toxicity: Harmful by inhalation and in contact with skin.
Skin Corrosion/Irritation: Not classified
Eye Damage/Irritation: Not classified.
Respiratory Sensitization: Not classified
Skin Sensitization: Not a skin sensitizer
Germ Cell Mutagenicity: Not classified
Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.
Reproductive Toxicity: May cause harm to the unborn child.
Specific Target Organ
Toxicity Single Exposure: May cause damage to liver. Vapors may cause drowsiness and dizziness.
Specific Target Organ
Toxicity Repeat Exposure: May cause damage to the respiratory system through prolonged or repeated exposure.
Aspiration Hazard: No classified.
Chronic Effects: Not classified.

12. ECOLOGICAL INFORMATION

Ecotoxicity: The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Aquatic Toxicity: \( L_D^{50} \) (fathead-minnow): 1.50 g/L / 96 hr
Mobility: Not determined
Persistence & Biodegradability: Not determined
Potential to Bioaccumulate: Not determined

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORTATION INFORMATION

DOT/ATA
Proper Shipping Name: Combustible Liquid, n.o.s.
DOT UN Number: 1993
Hazard Class: Combustible Liquid
Packing Group: III
Hazard Label: None

15. REGULATORY INFORMATION

U.S. Federal Regulations
CERCLA: Not listed.
TSCA: All ingredients of this material are listed on the TSCA inventory.
SARA Title III
Sections 302, 304, 313: This product does not contain any substances reportable under these sections.
Sections 311, 312:

<table>
<thead>
<tr>
<th>Hazard Classes</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Hazard</td>
<td>Yes</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>Yes</td>
</tr>
</tbody>
</table>

International Inventory Status
Canada (DSL): No
Europe (EINECS/ELINCS): No
Australia (AICS): No
Japan (MITI): No
South Korea (KECL): Yes
### 16. OTHER INFORMATION

| NFPA Ratings (scale 0 – 4) | Health, 2  
| Flammability, 2  
| Reactivity, 0  
| Personal Protection, H |
|---------------------------|--------------------------------------------------|
| HMIS Ratings (scale 0 – 4) | Health, 2  
| Flammability, 2  
| Reactivity, -  
| Personal Protection, H |

#### 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 |
| EC | European Commission |
| HMIS | Hazardous Materials Identification System |
| IARC | International Agency for Research on Cancer |
| 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 |
| RE | Repeat Exposure |
| 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 |
| SE | Single Exposure |
| STEL | Short Term Exposure Limit |
| STOT | Specific Target Organ Toxicity |
| TLV | Threshold Limit Value |
| TWA | Time Weighted Average |

#### Disclaimer:  
The information contained herein is based on data taken from sources believed to be both current and reliable at the time of publication. Aremco Products, Inc. makes no warranty, expressed or implied, as to the accuracy of this MSDS and assumes no liability arising from its use by others. Compliance with all applicable Federal, State and Local laws and regulations remains the responsibility of the user.