MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION
Product Name: Plastics Bonding UV Visible Light Adhesive

Item Numbers

UV curing Adhesive

Product Use/Class: Extreme Adhesives

MANUFACTURER: 63 Epping Road
Raymond, NH 03077

EMERGENCY TELEPHONE NUMBERS: Infotrac Phone # 800-535-5053

SECTION 2. - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>WT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Modified Acrylamide</td>
<td>2680-03-7</td>
<td>10-30</td>
</tr>
<tr>
<td>2</td>
<td>High Boiling Acrylate Monomer</td>
<td>5888-33-5</td>
<td>30-60</td>
</tr>
<tr>
<td>3</td>
<td>Photoinitiator blend</td>
<td>proprietary</td>
<td>1-5</td>
</tr>
<tr>
<td>4</td>
<td>Aliphatic Polyurethane Acrylate Oligomer</td>
<td>Proprietary</td>
<td>30-60</td>
</tr>
<tr>
<td>5</td>
<td>Silica amorphous, fumed</td>
<td>112945-52-5</td>
<td>1-5</td>
</tr>
</tbody>
</table>

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

EXPOSURE LIMITS 8 hrs. TWA (ppm)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>10 mg/m3 TWA</td>
<td>6 mg/m3 TWA</td>
<td>3 mg/m3 TWA</td>
</tr>
</tbody>
</table>

SECTION 3. - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

liquid is a moderate eye and skin irritant, Vapors may irritate eye, nose and throat

Moderately toxic by ingestion.

Modified Acrylamide maybe harmful if absorbed through skin in large amounts or if inhaled.

POTENTIAL HEALTH EFFECTS:

EYE:

Moderate irritant.

SKIN:
Mild irritant.
Product Name: UV Adhesive

INGESTION: Moderately toxic by ingestion

INHALATION:

CHRONIC: Ingestion may cause nausea, vomiting or diarrhea.

CONDITIONS AGGRAVATED BY EXPOSURE:
May cause dermatitis on prolonged contact in sensitive individuals. Inhalation may cause asthma and upper respiratory and lung disorders

SECTION 4. - FIRST AID MEASURES

EYE:
Immediately flush eyes with water for 15 minutes. Get medical attention.

SKIN:
Immediately wash with soap and water. Wash contaminated clothing before reuse. Do not use organic solvents on skin.

INHALATION:
Remove to fresh air. If symptoms persist, obtain medical attention.

INGESTION:
Do not induce vomiting. Keep individual calm. Get medical attention.

SECTION 5. - FIRE FIGHTING MEASURES

Flashpoint and Method: 171F Tag closed cup
Autoignition Temperature: NA

Flammable Limits: Not available

EXTINGUISHING MEDIA:
Carbon dioxide, foam, dry chemical

SPECIAL FIRE FIGHTING INSTRUCTIONS:
Not available

HAZARDOUS COMBUSTION PRODUCTS:
Oxides of carbon and nitrogen Irritating vapors
Product Name: UV Adhesive

SECTION 6. - ACCIDENTAL RELEASE MEASURES
Spontaneous hazardous polymerization may occur. Use eye and skin protection. Maintain adequate ventilation. Dike area to prevent spreading. Soak up with inert absorbent. Store in a half-filled, closed container until disposal. Dispose in accordance with local state and federal regulations.

SECTION 7. - HANDLING AND STORAGE
HANDLING:
Avoid eye and skin contact. Avoid prolonged or repeated breathing of vapors.

STORAGE:
Avoid storage over 100°F. Do not store in direct sunlight.

SECTION 8. - EXPOSURE CONTROLS/PERSONAL PROTECTION
ENGINEERING CONTROLS:
NA

PERSONAL PROTECTION:
RESPIRATORY PROTECTION:
Use proper positive air flow ventilation in work areas.

SKIN PROTECTION:
Avoid skin contact. Wear Neoprene® gloves

EYE PROTECTION:
Wear chemical splash goggles or side shield safety glasses.

OTHER PROTECTIVE EQUIPMENT: NA

SECTION 9. - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Pressure</td>
<td>Not defined</td>
</tr>
<tr>
<td>Solubility in H2O</td>
<td>low</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt;200°F</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>VOC</td>
<td>4.0 %</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.09</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>NA</td>
</tr>
<tr>
<td>pH</td>
<td>Does not apply</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear to slightly amber liquid</td>
</tr>
</tbody>
</table>

SECTION 10. - STABILITY AND REACTIVITY
STABILITY: unstable

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:
Oxidizers, heat, strong mineral acids, thiosulfates

HAZARDOUS POLYMERIZATION:
Will not occur

HAZARDOUS DECOMPOSITION PRODUCTS: dimethylamine
### SECTION 11. - TOXICOLOGICAL INFORMATION

**PRODUCT TOXICOLOGY DATA:** LC50 (vapor, 1 hr, rat) >500ppm.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified Acrylamide</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>High Boiling Point Acrylate</td>
<td>No</td>
<td>NA</td>
<td>No</td>
</tr>
<tr>
<td>Photoinitiator blend</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Polyurethane acrylate oligomer</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Silica gel</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

#### Target Organ and other health effects

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Target Organ and other health effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified Acrylamide</td>
<td>eye, irritant, kidney, mutagen</td>
</tr>
<tr>
<td>High Boiling Point Acrylate</td>
<td>Irritant, allergen</td>
</tr>
<tr>
<td>Photoinitiator blend</td>
<td>No target organs</td>
</tr>
<tr>
<td>Urethane oligomer resin</td>
<td>No data</td>
</tr>
<tr>
<td>Silica gel</td>
<td>Dust nuisance</td>
</tr>
</tbody>
</table>

### SECTION 12. - ECOLOGICAL INFORMATION

No data available.

### SECTION 13. - DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Incinerate following EPA and local regulations.

### SECTION 14. - TRANSPORT INFORMATION

**DOT (49 CFR 172):**

- **PROPER SHIPPING NAME:** Unrestricted (not more than 450 liters)
- **HAZARD CLASS:** Unrestricted
- **IDENTIFICATION NUMBER:** None
- **PACKING GROUP:** None
- **EXCEPTIONS:**
- **CLASS / DIVISION:**
- **INTERNATIONAL AIR TRANSPORTATION (IATA):**
  - **PROPER SHIPPING NAME:** Unrestricted
  - **IDENTIFICATION NUMBER:** None
  - **PACKING GROUP:** None
  - **EXCEPTIONS:**
SECTION 15. - REGULATORY INFORMATION

TSCA (Toxic Substance Control Act):
All ingredients are on the inventory or exempt from listing.

CERCLA (Comprehensive Emergency Response, Compensation, and Liability Act):
NA

CANADIAN INVENTORY STATUS:
All ingredients are on the inventory or exempt from listing

CALIFORNIA PROPOSITION 65:
This product does not contain chemicals listed on the Calif list as of March 2003

SECTION 16. - OTHER INFORMATION

Estimated NFPA®
Health 2 Fire 2 Reactivity 1 Specific Hazard: does not apply

Estimated Hazardous Material Information System (HMIS®) Ratings:
Health 2 Flammability 1 Reactivity 1 Protective Equipment: See section 8

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Extreme Adhesives, LLC
A Division Of Royal Adhesives and Sealants LLC
63 Epping Rd - P.O. Box 1445 - Raymond, NH 03077
603 895 4028 - Toll Free 800 888 GLUE - Fax 603 895 6236