Material Safety Data Sheet

Date of Issue: 8/19/09

1. Identification of substance:
Product Name: POLYLAST AROMATIC BINDER
Name: Polylast Systems LLC
Address: 15575 N. 83rd Way, Ste. A-1, Scottsdale, AZ 85260
Telephone: 480-998-3033
Emergency phone number: CHEMTREC (800) 424-9300

2. Hazards Identification:
HEALTH HAZARDS:
Eyes: Severe irritation, tearing, swelling, and possible damage to cornea.
Skin: Irritation, redness, swelling, skin sensitization, rash, scaling and blistering.
Inhalation: Mucous membrane and respiratory tract irritation, tightness of chest, Isocyanate sensitization.
Ingestion: Irritating and corrosive to mouth, stomach, and digestive tract.

3. Composition/Data on components:
<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NOISH PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylene Bisphenyl</td>
<td>0.02 ppm</td>
<td>0.005 ppm</td>
<td>0.005 ppm</td>
</tr>
<tr>
<td>Isocyanate</td>
<td>Ceiling</td>
<td>TWA</td>
<td>Ceiling</td>
</tr>
<tr>
<td>CAS# 101-68-8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Composition/Data on components:
After skin contact: Remove contaminated clothing. Clean affected area with soap and plenty of water. Call physician if irritation develops.
After eye contact: Rinse opened eye for at least 15 minutes under running water. Call a physician at once.
After swallowing: Do not induce vomiting. If conscious, give 1 to 2 cups of milk or water to drink. Consult a physician at once.
After inhalation: Remove from exposure area. Administer oxygen or artificial respiration as need. Obtain medical attention.
5. Firefighting measures:
Suitable extinguishing agent: Water spray, CO2, Foam, Dry chemical.
Protective equipment: Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by firefighters.

6. Accidental release measures:
Person-related safety precautions: Evacuate all non-essential personnel. Avoid contact with skin. Do not breathe aerosols or vapors.
Measures for environmental protection: Cover and contain spill with absorbent material. Place in open container. Remove to well-ventilated area and dilute with ammonia solution (water 90%, concentrated ammonia 8%, detergent 2%). Dispose of in accordance with local regulation.

7. Handling and storage:
Handling:
Information for safe handling: Keep containers tightly closed. Do not store above 150°F.
Information about protection against explosions and fires: Closed containers may rupture when exposed to extreme heat.

8. Exposure controls and personal protection:
Personal protective equipment:
General protective and hygienic measures: The usual precautionary measures should be adhered to general rules for handling chemicals.
Respiratory protection: Do not inhale vapors. Use NIOSH approved respiratory protection if TLV/PEL is exceeded. Do not enter storage area unless adequately ventilated.
Protection of hands: Protective butyl rubber or nitrile rubber gloves.
Eye protection: Chemical safety goggles.
Body protection: Protective work clothing.

9. Physical and chemical properties:
Form: Viscous liquid
Color: Amber
Water solubility: Reach with water.
Odor: Mild odor.
Flash point: >240 °F (PMCC)
Specific Gravity: 1.07

10. Stability and reactivity:
Avoid contact water; amines, strong bases, and alcohol.
Dangerous products of decomposition: Oxides of carbon, oxides of nitrogen, and traces of HCN.
11. Toxicology information:
Eyes: Severe irritation, tearing, swelling, and possible damage to cornea.
Skin: Irritation, redness, swelling skin sensitization, rash, scaling, and blistering.
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Ingestion: Irritating and corrosive to mouth, stomach, and digestive tract.

12. Ecological Information:
General Information: Based on experience no adverse effects are to be expected if correct disposal procedures have been followed.

13. Disposal Considerations
Recommendation: Observe local requirements. Dispose of in accordance with local regulations.

14. Transport Information
Land Transport (DOT)
Proper Shipping Name: Other Substances, liquid, n.o.s. (contains 4,4’-Diphenylmethane Diisocyanate (MDI)
Hazard Class or Division: 9
UN/NA Number: NA3082
Packing Group: III
Hazard Label(s): Class 9
RSPA/DOT Regulated Components: 4,4”-Diphenylmethane Diisocyanate (MDI)
Reportable Quantity: 50,000 lbs.

Additional Transportation Information: When in individual containers of less that the Product RQ, this material ships as non-regulated.

15. Regulatory information:
US. Toxic Substances Control Act: Listed on the TSCA inventory
US. EPA CERCLA Hazardous Substances (40 CFR 302)

Components
Methylene Bisphenyl Isocyanate Reportable quantity: 5,000 lbs.

SARA Section 311/312 Hazard Categories: Acute Health Hazard, Chronic Health Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA)
SARA Title III Section 302 Extremely Hazardous Substances (40 CFR 355)

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA)
SARA Title III Section 313 Extremely Hazardous Substances (40 CFR 372.65) - Supplier Notification Required:

Section 313 Supplier Notifications

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>% BY Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>101-68-8</td>
<td>Methylene Bisphenyl Isocyanate</td>
<td>10.0</td>
</tr>
<tr>
<td>9016-87-9</td>
<td>Polymethylene Polyphenyl Isocyanate</td>
<td>2.0</td>
</tr>
</tbody>
</table>

16. Other information:

**NFPA 704 Rating**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td></td>
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0=Insignificant 1=Slight 2=Moderate 4=Extreme

**HMIS Rating**

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This data is based on our present knowledge. However, it shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing data specifications sheet:

Product safety department

Appendix A):

**Components**

NONE

California Proposition 65:

This material has one or more ingredients known to the state of California, to cause cancer, birth defects or other reproductive harm.