1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Isobond™ UTN 1201-1 Cartridge "A" Component

MANUFACTURER
IsoSport® International, Inc.
203 Longview St
Canton, GA 30114
Service Number: 800-234-6300

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: White liquid.

IMMEDIATE CONCERNS: Irritating to eyes, respiratory system, and skin. The onset of respiratory symptoms may be delayed for several hours after exposure.

POTENTIAL HEALTH EFFECTS

EYES: Moderate eye irritant.
SKIN: Moderate skin irritant.

INGESTION: Ingestion may cause gastrointestinal discomfort.

INHALATION: Breathing small amounts of this material during normal handling is not likely to cause harmful effects. With inhalation of vapors or mist at concentrations above the TLV, respiratory tract irritation can occur. (nose, throat, lungs)

ROUTES OF ENTRY: Inhalation, skin contact, eye contact, ingestion.

SENSITIZATION: Any individual with isocyanate sensitization should not be exposed to this product. These individuals can react to exposure well below the TLV.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS</th>
<th>EINECS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylene Bisphenyl Isocyanate (MDI)</td>
<td>20 - 35</td>
<td>101-68-8</td>
<td>202-966-0</td>
</tr>
<tr>
<td>Modified MDI</td>
<td>&lt;= 20</td>
<td>31107-36-5</td>
<td></td>
</tr>
<tr>
<td>MDI Prepolymer</td>
<td>55 - 70</td>
<td>Not disclosed</td>
<td>Not disclosed</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Seek medical attention if irritation develops and persists.

SKIN: Immediately flush skin with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.

INGESTION: Do not induce vomiting. If the individual is conscious, rinse mouth with water and give 1 to 2
cups of water to drink. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**INHALATION:** Remove individual to fresh air. If respiratory irritation or other symptoms develop, seek medical attention.

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### 5. FIRE FIGHTING MEASURES

**FLASH POINT AND METHOD:** > (200°F) Closed Cup

**EXTINGUISHING MEDIA:** Dry Chemical, Carbon Dioxide, Chemical Foam, Water Fog or Spray. Do not use solid water stream as it may scatter and spread fire.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon Monoxide, Carbon Dioxide, Nitrous Oxide, and HCN.

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### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Clean up spills wearing proper personal protective equipment. (See section 8) Contain and absorb spill with sand, earth or other inert material. Wipe up residue and place in a suitable container for disposal.

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### 7. HANDLING AND STORAGE

**HANDLING:** Wear proper personal protective equipment. Keep containers securely sealed when not in use. Avoid physical damage to containers.

**STORAGE:** Keep container closed when not in use. Keep away from sources of heat.

**STORAGE TEMPERATURE:** (60°F) Minimum to (120°F) Maximum

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### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE GUIDELINES**

**OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EXPOSURE LIMITS</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylene Bisphenyl Isocyanate (MDI)</td>
<td>TWA</td>
<td>0.02* [1]</td>
<td>0.005</td>
</tr>
<tr>
<td>Modified MDI</td>
<td>TWA</td>
<td>0.20* [1]</td>
<td>0.051</td>
</tr>
<tr>
<td>MDI Prepolymer</td>
<td>TWA</td>
<td>NE [2]</td>
<td>NE</td>
</tr>
</tbody>
</table>

**Footnotes:**
1. * = Ceiling
2. NE = Not Established

**PERSONAL PROTECTIVE EQUIPMENT**

**EYES AND FACE:** Wear safety glasses with side shields or goggles.

**SKIN:** Wear impervious gloves.

**RESPIRATORY:** None required in normal use.

**WORK HYGIENIC PRACTICES:** Follow good normal hygiene practices. Avoid contact with skin. Avoid eating, drinking, or smoking while using this product. Wash hands thoroughly after use.
9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid
ODOR: Slightly musty
COLOR: White
BOILING POINT: Not Established
FREEZING POINT: Not Determined
FLASH POINT AND METHOD: > (200°F) Closed Cup
SOLUBILITY IN WATER: Insoluble

10. STABILITY AND REACTIVITY

STABILITY: Stable.
CONDITIONS TO AVOID: Temperature extremes.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide, Nitrous Oxide, and HCN.

11. TOXICOLOGICAL INFORMATION

ACUTE

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ORAL LD₅₀ (rat)</th>
<th>DERMAL LD₅₀ (rabbit)</th>
<th>INHALATION LC₅₀ (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylene Bisphenyl Isocyanate (MDI)</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt; 5000 mg/kg</td>
<td>490 mg/m³/4h (respirable aerosol)</td>
</tr>
</tbody>
</table>

EYE EFFECTS: Moderate eye irritant.
SKIN EFFECTS: Moderate skin irritant.
CARCINOGENICITY
IARC: Not classified as a carcinogen.
NTP: Not classified as a carcinogen.
OSHA: Not classified as a carcinogen.

12. ECOLOGICAL INFORMATION

CHEMICAL FATE INFORMATION: Immiscible with water, but will react with water to produce inert and non-biodegradable solids.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be in accordance with local, state, provincial or national regulations.
EMPTY CONTAINER: Empty containers can be disposed as trash with paper waste.
RCRA/EPA WASTE INFORMATION: If discarded in its purchased form, this material is not a hazardous waste under RCRA (40 CFR 261).
GENERAL COMMENTS: The generation of waste should be avoided or minimized whenever possible.
Chemical waste, even small quantities, should never be poured down drains, sewers or waterways.

### 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Not regulated for transportation.

### 15. REGULATORY INFORMATION

**UNITED STATES**

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**311/312 HAZARD CATEGORIES:** Immediate health hazard. Delayed health hazard.

**EPCRA SECTION 313 SUPPLIER NOTIFICATION**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylene Bisphenyl Isocyanate (MDI)</td>
<td>20 - 35</td>
<td>101-68-8</td>
<td>Diisocyanate Category</td>
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</table>

**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CERCLA RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylene Bisphenyl Isocyanate (MDI)</td>
<td>20 - 35</td>
<td>5000 lbs</td>
</tr>
</tbody>
</table>

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

**TSCA REGULATORY:** All components are on TSCA inventory.

### 16. OTHER INFORMATION

**PREPARED BY:** L. Priest

**HMIS RATING**

<table>
<thead>
<tr>
<th>HEALTH:</th>
<th>FLAMMABILITY:</th>
<th>PHYSICAL HAZARD:</th>
<th>PERSONAL PROTECTION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**HMIS RATING NOTES:**

- If present, the asterisk signifies a chronic health hazard.
- Rating system: 0 = low hazard to 4 = high hazard

**COMMENTS:**

- Key Legend Information:
  - ACGIH - American Conference of Governmental Industrial Hygienists
  - EPA - Environmental Protection Agency
  - IARC - International Agency for Research on Cancer
  - NTP - National Toxicology Program
  - OEL - Occupational Exposure Limit
  - OSHA - Occupational Safety and Health Administration
  - PEL - Permissible Exposure Limit
  - STEL - Short Term Exposure Limit
  - TLV - Threshold Limit Value
TWA - Time Weighted Average

MANUFACTURER DISCLAIMER: The information in this MSDS was obtained from sources that we believe are reliable. The information is provided without warranty, implied or expressed, concerning accuracy. The manufacturer or supplier assumes no legal responsibility for use or reliance on this information. This MSDS is provided solely for the purpose of conveying health, safety, and environmental information. This MSDS is not a specification data sheet. Some of the information and conclusions may be derived from sources other than test data on the material itself.
1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Isobond™ UTN 1201-1 Cartridge "B" Component

MANUFACTURER
IsoSport® International, Inc.
203 Longview St
Canton, GA 30114
Service Number: 800-234-6300

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Black or gray liquid.

IMMEDIATE CONCERNS: Mildly irritating to skin and eyes. Gastrointestinal discomfort if swallowed.

POTENTIAL HEALTH EFFECTS

EYES: May cause mild eye irritation.

SKIN: May cause mild skin irritation.

INGESTION: Ingestion may cause mild gastrointestinal discomfort.

INHALATION: Not a respiratory irritant.

ROUTES OF ENTRY: Skin, eyes, ingestion.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydroxy terminated poly(oxyalkylene) polyol</td>
<td>20 - 40</td>
<td>9051-49-4</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 5 minutes, lifting upper and lower eyelids occasionally. Seek medical attention if irritation persists.

SKIN: Wash thoroughly with soap and water. Seek medical attention if irritation develops and persists.

INGESTION: Give affected person one or two glasses of water and induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention if person experiences gastrointestinal discomfort.

INHALATION: Remove individual to fresh air. If respiratory irritation or other symptoms develop, seek medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT AND METHOD: > (200°F) Closed Cup

EXTINCTION MEDIA: Dry Chemical, Carbon Dioxide, Water Fog or Spray.
HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, and oxides of nitrogen.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb with dry chemical absorbent, earth, sand, or any other inert material. Wear proper personal protective equipment. (See Section 8) Place in a chemical waste container for proper disposal.

7. HANDLING AND STORAGE

HANDLING: Wear proper personal protective equipment. Keep containers securely sealed when not in use. Avoid physical damage to containers.

STORAGE: Keep container closed when not in use. Keep away from sources of heat.

STORAGE TEMPERATURE: (60°F) Minimum to (120°F) Maximum

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydroxy terminated poly(oxyalkylene) polyol</td>
<td>TWA</td>
<td>NE [1]</td>
</tr>
</tbody>
</table>

Footnotes:
1. NE = Not Established

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields or goggles.

SKIN: Wear impervious gloves.

RESPIRATORY: None required in normal use.

WORK HYGIENIC PRACTICES: Follow good normal hygiene practices. Avoid contact with skin. Avoid eating, drinking, or smoking while using this product. Wash hands thoroughly after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Low

COLOR: Black or gray

BOILING POINT: Not Established

FREEZING POINT: Not Established

FLASH POINT AND METHOD: > (200°F) Closed Cup

SOLUBILITY IN WATER: Partially Soluble

10. STABILITY AND REACTIVITY

STABILITY: Stable.

POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Temperature extremes.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides.

11. TOXICOLOGICAL INFORMATION

ACUTE

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ORAL LD_{50} (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydroxy terminated poly(oxyalkylene) polyol</td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>

EYE EFFECTS: Mild eye irritant.

SKIN EFFECTS: Mild skin irritant.

CARCINOGENICITY

IARC: Not classified as a carcinogen.
NTP: Not classified as a carcinogen.
OSHA: Not classified as a carcinogen.

12. ECOLOGICAL INFORMATION

GENERAL COMMENTS: No testing for product as a whole.

13. DISPOSAL CONSIDERATIONS

EMPTY CONTAINER: Empty containers can be disposed as trash with paper waste.

RCRA/EPA WASTE INFORMATION: If discarded in its purchased form, this material is not a hazardous waste under RCRA (40 CFR 261).

GENERAL COMMENTS: The generation of waste should be avoided or minimized whenever possible. Chemical waste, even small quantities, should never be poured down drains, sewers or waterways.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated for transportation.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: None

313 REPORTABLE INGREDIENTS: This product does not contain chemicals that exceed their *de minimis* reporting levels.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: No chemicals in this material are subject to the reporting requirements of CERCLA.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All components are on TSCA inventory.
16. OTHER INFORMATION

PREPARED BY: L. Priest

HMIS RATING

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLAMMABILITY:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSICAL HAZARD:</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PERSONAL PROTECTION</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

HMIS RATINGS NOTES: Rating system: 0 = low hazard to 4 = high hazard

COMMENTS:

Key Legend Information:
ACGIH - American Conference of Governmental Industrial Hygienists
EPA - Environmental Protection Agency
IARC - International Agency for Research on Cancer
NTP - National Toxicology Program
OEL - Occupational Exposure Limit
OSHA - Occupational Safety and Health Administration
PEL - Permissible Exposure Limit
STEL - Short Term Exposure Limit
TLV - Threshold Limit Value
TWA - Time Weighted Average

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