



# Millennium Adhesive Products, Inc.

## Material Safety Data Sheet

### Adurel AF15 foam adhesive part A

Date Prepared: 11/9/2006

Page 1/4

Replaces: 9/14/2005

#### Section 1: General Information

Chemical Family: Adhesive

**Emergency Phone: CHEMTREC(800) 424-9300**

#### Section 2: Molecular Composition

| Common Name and Chemical                               | Exposure Limit   | Weight %  | CAS Number   |
|--|--|-----------|--------------|
| Polyurethane Polymer                                   |  | 35.0-70.0 | Trade Secret |
| Methylenebis(phenylisocyanate) (MDI)                   | See Below<br>ACGIH: TLV: 0.005 ppm; as TWA<br>OSHA PEL: C 0.2 mg/m <sup>3</sup> (0.02 ppm)<br>NIOSH REL: TWA 0.05 mg/m <sup>3</sup> (0.005 ppm)<br>C 0.2 mg/m <sup>3</sup> (0.020 ppm) 10-minute<br>IDLH: 75 mg/m <sup>3</sup> | 8.5-18.0  | 101-68-8     |
| Polymeric diphenylmethane diisocyanate (polymeric MDI) |  | 8.5-18.0  | 9016-87-9    |
| Methylene Bis (phenylisocyanate) isomers               | See Below<br>ACGIH: TLV: 0.005 ppm; as TWA<br>OSHA PEL: C 0.2 mg/m <sup>3</sup> (0.02 ppm)<br>NIOSH REL: TWA 0.05 mg/m <sup>3</sup> (0.005 ppm)<br>C 0.2 mg/m <sup>3</sup> (0.020 ppm) 10-minute<br>IDLH: 75 mg/m <sup>3</sup> | <1.0      | 26447-40-5   |

#### Section 3: Hazardous Health Effects

Aggravated Health Effects

Potential Health Effect/Route of Entry

Inhalation of Particulates (spraying) and Fumes: Irritation, coughing spell, wear mask if spraying, and allergic respiratory sensitization.

Eyes: Irritation

Ingestion: Can cause gastrointestinal irritation.

Skin: Can cause irritation, Dermatitis

Acute Health Effects: See Above in inhalation of particles and fumes

#### Section 4: First Aid Measures

Inhalation: Leave area to breathe fresh air. Oxygen therapy may be necessary, seek medical attention if needed. Should be observed by physician immediately if overexposure is severe.

Eyes: Flush immediately with running water for 15 minutes, lifting the upper and lower lids occasionally. Get medical attention immediately.

Ingestion: Get medical attention immediately. Do not induce vomiting unless advised by a physician.

Skin: Wash area of contact thoroughly with hand cleaner followed by soap and water. If irritation, rash or other disorders develop, get medical attention immediately.



# Millennium Adhesive Products, Inc.

## Material Safety Data Sheet

### Adurel AF15 foam adhesive part A

Date Prepared: 11/9/2006

Page 2/4

Replaces: 9/14/2005

#### Section 5: Fire Fighting Measures

Flash Point: >350 F (177<sup>o</sup> C)  
Method: PM cc  
Lower Flammability Limit: N/A  
Upper Flammability Limit: N/A  
Auto Ignition Temperature: Not Established  
Extinguishing Media: CO<sub>2</sub> foam, dry chemical  
Fire and Explosion Hazards: N/A

#### Special Fire Fighting Procedures:

During a fire, personnel at the scene are to avoid exposure to fumes using accepted fire fighting techniques. Wear proper firefighting gear including but not limited to SCBA

Products of Combustion: Hydrocyanic acid, oxides of nitrogen can form, carbon monoxide, carbon dioxide, and other hydrocarbons

Other Precautions: None

#### Section 6: Accidental Release Measures

Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal. Follow all local, state, federal, and provincial regulations for disposal of the spilled material.

#### Section 7: Handling and Storage

#### Handling and Storage Precautions:

Store under normal warehouse conditions, and keep away from excessive heat. Prevent ingestion, and contact with skin and eyes. Keep container closed when not in use, because it will cure when exposed to atmospheric moisture. Wear chemical resistant gloves when handling.

#### Section 8: Physical and Chemical Properties

|                     |                              |
|---------------------|------------------------------|
| Odor                | Negligible                   |
| Color:              | Amber                        |
| Physical State:     | Viscous Liquid               |
| PH:                 | N/A                          |
| Vapor Pressure:     | N/A                          |
| Vapor Density:      | N/A                          |
| Boiling Point       | N/A                          |
| Melting Point       | N/A                          |
| Freezing Point      | N/A                          |
| Solubility in Water | Insoluble, reacts with water |
| Specific Gravity    | 1.15                         |
| % Volatile          | <0.15%                       |



# Millennium Adhesive Products, Inc.

## Material Safety Data Sheet

### Adurel AF15 foam adhesive part A

Date Prepared: 11/9/2006

Page 3/4

Replaces: 9/14/2005

#### Section 9: Reactivity/ Stability

Stability: Stable

Incompatible Products: Avoid contact with water, acids, bases, alcohols, and metal compounds.

Conditions to Avoid Polymerization: Hazardous polymerization will not occur.

#### Section 10: Toxicological Information

Eyes: See Section 3

Ingestion: “ “

Inhalation: “ “

Skin: “ “

Subchronic: “ “

Chronic: “ “

#### Section 11: Ecological Information

Ecotoxicological Data: N/A

Chemical Fate: N/A

#### Section 12: Disposal Considerations

RCRA Class: N/A

Disposal Method: Not regulated by RCRA. Dispose of in compliance with state, local, federal and provincial regulations.

EPA Reportable Quantities: N/A

#### Section 13: Transportation Data

DOT Shipping Name: Not Regulated

DOT Hazard Class: N/A

UN/NA Number: N/A

Packaging Class: N/A

Reportable Quantity (RQ): 5000 Lbs Methylenebis(phenylisocyanate) (MDI)

#### Section 14: Regulatory Information

TSCA Status: On the TSCA Inventory

OSHA Status: Considered hazardous based on the following criteria:  
Irritant



# Millennium Adhesive Products, Inc.

## Material Safety Data Sheet

### Adurel AF15 foam adhesive part A

Date Prepared: 11/9/2006

Page 4/4

Replaces: 9/14/2005

#### Sensitizer

Target Organs: Liver, Blood, Reproductive, Lung, Skin, Spleen

#### OSHA Hazardous Components

Methylenebis(Phenylisocyanate) (MDI)

#### CAS Number

101-68-8

Not classified as a carcinogen with NTP, ACGIH, or IARC.

Not regulated as a carcinogen with OSHA.

Classified by IARC in Group 3 (not classifiable as to its carcinogenicity to humans)

#### Compliance Quantities

N/A

#### SARA 311 Ratings

Immediate Health Hazard Y

Delayed Health Hazard Y

Fire Hazard N

Reactivity Hazard N

Sudden Release of Pressure Hazard N

#### SARA 313 Ingredients

Methylene Bis (phenylisocyanate)

#### CAS Number

101-68-8

Proposition 65 Ingredients (Chemicals known to the State of California to cause cancer or birth defects or other reproductive harm): None

WHMIS CODES: A/2/D, B/2/D

#### Section 15: Other Information

**FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. THE HAZARD INFORMATION HEREIN IS OFFERED SOLELY FOR THE CONSIDERATION OF THE USER, SUBJECT TO HIS OWN INVESTIGATION OF COMPLIANCE WITH APPLICABLE REGULATIONS, INCLUDING THE SAFE USE OF THE PRODUCT UNDER EVERY FORSEEABLE CONDITION THE MANUFACTURER AND DISTRIBUTER TAKE NO RESPONSIBILITY FOR THE IMPROPER USE OF THIS PRODUCT.**



# Millennium Adhesive Products, Inc.

## Material Safety Data Sheet

### Adurel AF15 foam adhesive part B

Date Prepared: 11/9/2006

Page 1/4

Replaces: 9/14/2005

#### Section 1

Chemical Family: Adhesive

**Emergency Phone: CHEMTREC(800) 424-9300**

#### Section 2: Molecular Composition

| Common Name and Chemical Name | Exposure Limit | Weight %  | CAS Number |
|-------------------------------|----------------|-----------|------------|
| Polypropylene Glycol          | Not Listed     | 90.0-99.0 | 25322-69-4 |
| Polyether Polyol              | Not Listed     | 1.5-10.0  | Not Listed |
| Tertiary Amines               | Not Listed     | 0.5-4.0   | Not Listed |

#### Section 3, Hazardous Health Effects

Aggravated Health Effects

Potential Health Effect/Route of Entry

Inhalation of Particulates (spraying) and Fumes: Irritation, coughing spell, wear mask if spraying, and allergic respiratory sensitization.

Eyes: Irritation

Ingestion: Can cause gastrointestinal irritation.

Skin: Can cause irritation, Dermatitis

Acute Health Effects: See Above at inhalation of particles and fumes

#### Section 4- First Aid Measures

**Inhalation:** Leave area to breathe fresh air. Should be observed by physician immediately if overexposure is severe. Oxygen therapy may be necessary, seek medical attention if needed.

**Eyes:** Flush immediately with running water for 15 minutes, lifting the upper and lower lids occasionally. Get medical attention immediately.

**Ingestion:** Get medical attention immediately. Do not induce vomiting unless advised by a physician.

**Skin:** Wash area of contact thoroughly with hand cleaner followed by soap and water. If irritation, rash or other disorders develop, get medical attention immediately.



# Millennium Adhesive Products, Inc.

## Material Safety Data Sheet

### Adurel AF15 foam adhesive part B

Date Prepared: 11/9/2006

Page 2/4

Replaces: 9/14/2005

#### Section 5- Fire Fighting Measures

Flash Point: >350 F (177<sup>0</sup>C)  
Method: PM cc  
Lower Flammability Limit: N/A  
Upper Flammability Limit: N/A  
Auto Ignition Temperature: Not Established  
Extinguishing Media: Water, foam  
Fire and Explosion Hazards: N/A

#### Special Fire Fighting Procedures:

During a fire, personnel at the scene are to prevent exposure to fumes using accepted fire fighting techniques.

#### Products of Combustion:

Hydrocyanic acid, oxides of nitrogen can form, carbon monoxide, carbon dioxide, and other hydrocarbons

Other Precautions: None

#### Section 6- Accidental Release Measures

Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal. Follow all local, state, federal, and provincial regulations for disposal of the spilled material.

#### Section 7- Handling and Storage

Handling and Storage Precautions: Store under normal warehouse conditions, and keep away from excessive heat. Prevent ingestion, and contact with skin and eyes. Keep container closed when not in use, because it will cure when exposed to atmospheric moisture. Wear chemical resistant gloves when handling.

#### Section 8- Physical and Chemical Properties

Odor: Negligible  
Color: Off white  
Physical State: Viscous Liquid  
PH: N/A  
Vapor Pressure: N/A  
Vapor Density: N/A  
Boiling Point: N/A  
Melting Point: N/A  
Freezing Point: N/A  
Solubility in Water: N/A  
Specific Gravity: 1.00  
% Volatile: <0.15%

#### Section 9- Reactivity/ Stability



# Millennium Adhesive Products, Inc.

## Material Safety Data Sheet

### Adurel AF15 foam adhesive part B

Date Prepared: 11/9/2006

Page 3/4

Replaces: 9/14/2005

Stability: Stable

Incompatible Products: Avoid contact with water, acids, bases, alcohols, and metal compounds.

Conditions to Avoid Polymerization: Hazardous polymerization will not occur.

#### Section 10- Toxicological Information

|             |               |
|-------------|---------------|
| Eyes        | See Section 3 |
| Ingestion:  | “ “           |
| Inhalation: | “ “           |
| Skin:       | “ “           |
| Subchronic: | “ “           |
| Chronic     | “ “           |

#### Section 11- Ecological Information

Ecotoxicological Data: N/A

Chemical Fate: N/A

#### Section 12- Disposal Considerations

RCRA Class: N/A

Disposal Method: Not regulated by RCRA. Dispose of in compliance with state, local, federal, and provincial regulations.

EPA Reportable Quantities N/A

#### Section 13- Transportation Data

|                       |                |
|-----------------------|----------------|
| DOT Shipping Name:    | Not Regulated  |
| DOT Hazard Class:     | Not Applicable |
| UN/NA Number:         | N/A            |
| Transportation Notes: | N/A            |

#### Section 14- Regulatory Information

TSCA Status: On the TSCA Inventory

OSHA Status: Considered hazardous based on the following criteria: Irritant, Sensitizer

Target Organs: Lung, Skin



# Millennium Adhesive Products, Inc.

## Material Safety Data Sheet

### Adurel AF15 foam adhesive part B

Date Prepared: 11/9/2006

Page 4/4

Replaces: 9/14/2005

OSHA Hazardous Components

CAS Number

None

SARA 311 Ratings

|                                   |   |
|-----------------------------------|---|
| Immediate Health Hazard           | N |
| Delayed Health Hazard             | N |
| Fire Hazard                       | N |
| Reactivity Hazard                 | N |
| Sudden Release of Pressure Hazard | N |

SARA 313 Ingredients

CAS Number --- None

Proposition 65 Ingredients: Chemicals known to the State of California to cause cancer or birth defects or other reproductive harm: NONE

WHMIS CODES: A/2/D

#### Section 15- Other Information

**FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. THE HAZARD INFORMATION HEREIN IS OFFERED SOLELY FOR THE CONSIDERATION OF THE USER, SUBJECT TO HIS OWN INVESTIGATION OF COMPLIANCE WITH APPLICABLE REGULATIONS, INCLUDING THE SAFE USE OF THE PRODUCT UNDER EVERY FORSEEABLE CONDITION. THE MANUFACTURER AND DISTRIBUTER TAKE NO RESPONSIBILITY FOR THE IMPROPER USE OF THIS PRODUCT.**