

**MATERIAL SAFETY DATA SHEET**  
**Stevens Roofing Systems**  
**STEVENS Insulation Adhesive**

**Printed: 09/10/03**  
**Revised: 09/10/03**

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**SECTION I - PRODUCT IDENTIFICATION**

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Manufacturer: STEVENS ROOFING SYSTEMS  
 Carolina Plant  
 1535 Elastic Plant Road  
 Westfield, NC 27053

Information Phone: 336-351-3131  
 Emergency Phone: 413-533-8100  
 CHEMTREC Phone: 800-424-9300  
 International: 202-483-7616

Product Class: Adhesive  
 Trade Name: STEVENS Insulation Adhesive  
 Product Code: 2087085 or 2087086  
 C.A.S. Number: MIXTURE  
 DOT Hazard Class: Not regulated by DOT

NFPA Ratings: Health - 2  
 none -> extreme Flammability - 1  
 0 ---> 4 Reactivity - 1

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**SECTION II - HAZARDOUS INGREDIENTS**

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Ingredients	CAS #	Weight %	Exposure Limits
URETHANE PREPOLYMER	Trade Secret	60 – 64	No exposure limits established
METHYLENE PHENYLENE ISOCYANATE	101-68-8	22.0	OSHA PEL – 0.020 ppm – Ceiling OSHA VPEL – 0.020 ppm – Ceiling ACGIH TLV – 0.005 ppm – TWA
POLYMERIC MDI	9016-87-9	8.0	No exposure limits established
DIPHENYLMETHANE DIISOCYANATE HOMOPOLYMER	25686-28-6	3.0 – 7.0	No exposure limits established
METHYLENE DIPHENYLISOCYANATE	26447-40-5	1.0 – 4.0	No exposure limits established
PARA TOLUENESULFONYL ISOCYANATE	4083-64-1	1.0 – 3.0	No exposure limits established

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**SECTION III - PHYSICAL DATA**

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Boiling Point: (for component) 291°F  
 Vapor Pressure: (for component) 1.00 mmHg  
 Evaporation Rate: No Data  
 Liquid Density: 9.6 lbs/gal @ 77°F  
 Appearance: Tan viscose liquid

Percent Volatiles: No Data  
 Vapor Density: No Data  
 Viscosity: 5,000 – 10,000 cPs  
 Specific Gravity: 1.151 @ 77°F

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**SECTION IV - FIRE AND EXPLOSION HAZARD DANGER**

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Flash Point: > 2000 F  
 Explosive Limit: No Data

Autoignition Temperature: No Data

**-HAZARDOUS PRODUCTS OF COMBUSTION**

May form carbon dioxide, carbon monoxide, hydrogen cyanide, nitrogen compounds, and various hydrocarbons.

**-EXTINGUISHING MEDIA**

Regular foam, water fog, carbon dioxide, dry chemical

**- FIRE-FIGHTING PROCEDURES**

Water or foam may cause frothing which can be violent and possibly endanger the life of the firefighter. Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.

Refer to the personal protective equipment section of this MSDS.

**- FIRE & EXPLOSION HAZARDS**

Never use welding or cutting torch on or near containers (even empty) because product (even residue) can ignite explosively.

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**SECTION V - HEALTH HAZARD DATA**

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**-PRIMARY ROUTES OF ENTRY**

Inhalation, skin contact and ingestion

**-EYE**

May cause mild eye irritation. Symptoms include stinging, tearing and redness.

**FIRST AID MEASURES** – If symptoms develop, move individual away from exposure and into fresh air.

Flush eyes gently with water while holding eyelids open. If symptoms persist or there is any difficulty with vision, seek medical attention.

**-SKIN**

Can cause skin irritation. Symptoms may include redness and burning of skin and other skin damage. Additional symptoms of skin contact may include allergic skin reaction (delayed skin rash, which may be followed by blistering, scaling and other skin effects).

**FIRST AID MEASURES** – Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

**-INGESTION**

Ingesting small amounts of this material during normal handling is not likely to cause harmful effects. Ingestion of large quantities may be harmful.

**FIRST AID MEASURES** – Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with head down. Contact a physician, medical facility or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

**-INHALATION**

Breathing of vapor or mist is possible. Breathing aerosol and/or mist is possible when material is sprayed.

Aerosol and mist may present a greater risk of injury because more material may be present in the air than from vapor alone. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

**FIRST AID MEASURES** – If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**-SYMPTOMS OF EXPOSURE**

Signs and symptoms of exposure to this material through breathing, ingestion and/or skin absorption, may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), cough, tightness of the chest, headache, shortness of breath, allergic reaction (causes narrowing of the air passages of

the lungs, sweating, flushing, hives, rapid heart rate and lowered blood pressure).

**-TARGET ORGAN EFFECTS**

Overexposure to this material (or its components) has been suggested as a cause of skin sensitization and respiratory sensitization.

**-NOTE TO PHYSICIANS**

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: respiratory tract, skin and lung (for example, asthma-like conditions).

**-DEVELOPMENTAL INFORMATION**

There are no data available for assessing risk to the fetus from maternal exposure to this material.

**-CANCER INFORMATION**

In a two-year inhalation study in rats, exposure to polymeric methylene bisphenylisocyanate (MDI) aerosol caused a significant increase in benign (noncarcinogenic) lung tumors, along with a single carcinogenic lung tumor, at the highest dose only (6 mg/m<sup>3</sup>). The tumors occurred along with irritation of the respiratory tract and the accumulation of a yellow material in the lungs. There was irritation only at 1.0 mg/m<sup>3</sup> and no effect at 0.2 mg/m<sup>3</sup>. IARC, NTP and OSHA do not list MDI as carcinogenic.

**-OTHER HEALTH EFFECTS**

No data

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**SECTION VI - REACTIVITY DATA**

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**-STABILITY**

Unstable

Stable

**-HAZARDOUS POLYMERIZATION**

Product can undergo hazardous polymerization. Avoid contact with strong alkalines, strong mineral acids and water.

**-INCOMPATIBILITY (MATERIALS TO AVOID)**

Avoid contact with alcohols, strong alkalines, strong mineral acids and water.

**-CONDITIONS TO AVOID**

Excessive heat

**-HAZARDOUS DECOMPOSITION PRODUCTS**

May form carbon monoxide, carbon dioxide, hydrogen cyanide, nitrogen compounds or various hydrocarbons

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**SECTION VII - SPILL OR LEAK PROCEDURES**

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**-SMALL SPILL**

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

**-LARGE SPILL**

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred. Persons not wearing protective equipment should be excluded from the area of the spill until clean up has been completed. Stop spill at source. Dike area of spill to prevent spreading. Pump liquid to salvage tank. Neutralize spill with an aqueous solution of ammonia. Remaining liquid may be taken up



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-SARA 313 COMPONENTS – 40 CFR 372.65

Section 313 Component	CAS #	Weight %
METHYLENE BIS(PHENYLISOCYANATE) (MDI)	101-68-8	21.61
POLYMERIC DIPHENYLMETHANE DIISOCYANATE	9016-87-9	7.51

-OSHA PROCESS SAFETY MANAGEMENT 29 CFR 1910

None listed

-DOT INFORMATION 49 CFR 172.101

DOT Description: Not regulated by DOT

Component	Reportable Quantity (lbs)
METHYLENE BISPHENOL ISOCYANATE (MDI)	23,137

The DOT Transportation Information may vary with the container and the mode of shipment.

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**SECTION XI - DISCLAIMER**

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