

# Firestone Building Products Company

## Material Safety Data Sheet

February 17, 2011

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### SECTION 1: PRODUCT IDENTIFICATION

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Product Name: XR Stick™ Adhesive Part 1  
Chemical Name /Synonym: Polymeric MDI  
Chemical Family: Polymethylene Polyphenylisocyanate  
24-Hour Emergency Phone: (800) 424-9300 CHEMTREC  
Manufacturer's Name: Firestone Building Products Company  
Manufacturer's Address: 250 West 96<sup>th</sup> Street, Indianapolis, IN 46260  
NFPA Hazard Rating: Health 2, Flammability 1, Reactivity 2  
HMIS Hazard Rating: Health 2, Flammability 1, Reactivity 1

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### SECTION 2: CHEMICAL COMPOSITION

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Chemical Name:	Common Name:	CAS #:	% (by wt)	Exposure Limits:
Diphenylmethane diisocyanate	Monomeric MDI	101-68-8	38	ACGIH TLV 0.005 ppm OSHA Ceiling 0.02 ppm
Polymethylene Polyphenyl Isocyanate	Polymeric MDI	9016-87-9	<55	None Established
MDI Mixed Isomers	MDI	26447-40-5	<10	None Established

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### SECTION 3: HAZARD IDENTIFICATION

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Primary Route of Exposure: Inhalation, skin or eye contact.

Signs and Symptoms of Exposure: This material may irritate the eyes and skin following contact. Skin conditions ranging from localized itching to more or less widespread eczema may occur. Vapors and aerosols can irritate eyes, nose and respiratory passages. The onset of respiratory symptoms may be delayed for several hours after exposure. Severe overexposure via inhalation may lead to pulmonary edema. Although swallowing this product is unlikely a means of exposure, irritation of the mouth, pharynx, esophagus and stomach can develop following ingestion.

Medical Conditions Aggravated by Exposure: Individuals who are sensitized to Isocyanates and those with pre-existing lung diseases or conditions, including non-specific bronchial hyperactivity or asthma.

Chronic Effects: Skin sensitization and/or irritation may develop after repeated and/or prolonged contact with human skin. MDI can induce respiratory allergic sensitization with asthma-like symptoms. Symptoms include chronic cough, tightness of chest with difficulty in breathing. These symptoms may be immediate or delayed up to several hours after exposure.

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Carcinogenicity:	The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP. Results from a lifetime inhalation study of rats indicate that respirable polymeric MDI aerosol has tumorigenic potential. The available human evidence is inadequate to describe the carcinogenic potential of polymeric or monomeric MDI.
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### SECTION 4: FIRST AID MEASURES

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First Aid Procedures:	For eyes, hold eyelids open and wash with gentle stream of water for at least 15 minutes preferably at eyewash fountain. For skin contact wash affected area thoroughly with soap and water. For inhalation, remove to fresh uncontaminated air. If breathing is difficult, give oxygen and seek medical attention. In case of accidental ingestion, if the person is conscious, wash out the mouth with water and give the person 1 or 2 glasses of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention and advise the physician or poison center of the nature of the material.
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### SECTION 5: FIRE FIGHTING PROCEDURES

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Suitable Extinguishing Media:	Carbon dioxide, dry chemical, dry sand, alcohol-resistant foam. If water is used, use in very large quantities. The reaction between water and hot isocyanate may be vigorous.
Hazardous Combustion Products:	Carbon monoxide, carbon dioxide, nitrogen oxides, toluene, hydrogen cyanide, aromatic isocyanates.
Recommended Fire Fighting Procedures:	Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Self-contained breathing apparatus with full-face piece and protective clothing. Contain run-off water with temporary barriers.
Unusual Fire and Explosion Hazards:	At temperatures above 400° F, MDI can polymerize/decompose causing pressure build-up in closed containers and possibly rupture. Avoid water contamination in closed containers which may cause rupture (carbon dioxide is evolved). Containers may burst under intense heat. Water contamination will produce carbon dioxide. Violent reaction with alcohols. Do not reseal contaminated containers as pressure buildup may rupture them.

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### SECTION 6: PRECAUTIONS FOR SAFE HANDLING AND USE

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Steps to Be Taken in Case Material is Released or Spilled:	Contain spill. Clean-up should only be performed by trained personnel. Absorb with sawdust or other absorbent material and shovel into acceptable container. Dispose of waste in approved landfill. People dealing with major spills should wear full protective clothing including a full-face supplied air respirator. Evacuate the area. Prevent further leakage, spillage or entry into drains.
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Precautions to Be Taken in Handling and Storing:

Store containers between 60° F and 80° F, out of sunlight, in original containers for up to 18 months. Keep tightly sealed to prevent moisture contamination. Relieve pressure slowly when opening container. Once opened, protect contents from water with dry atmosphere. If isocyanate becomes contaminated, do not reseal. Empty isocyanate drums or other container should be decontaminated by filling with water or decontamination solution, preferably outdoors. Allow to stand for 24-48 hours open to the atmosphere. **DO NOT SEAL DRUMS OR CONTAINERS.** Drain the drums and puncture to prevent reuse. Dispose of as ordinary industrial waste.

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### SECTION 7: EXPOSURE CONTROLS / PERSONAL PROTECTION

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Ventilation:	If needed, use local exhaust to keep airborne concentrations below applicable exposure limits.
Respiratory Protection:	If airborne concentrations exceed the established exposure limits based on employer determined exposure monitoring or if chemical concentrations are unknown, use a NIOSH approved respirator.
Eye Protection:	Use safety glasses with side shields or chemical tight goggles; full-face shield in addition if splashing is possible.
Skin Protection:	Protective gloves, such as rubber, may be required based upon end-user's potential exposure determination.
Other:	Typically none required.
Work / Hygienic Practices:	Wash exposed skin prior to eating, drinking or smoking and at the end of each shift. Wash contaminated clothing prior to reuse.

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### SECTION 8: PHYSICAL AND CHEMICAL PROPERTIES

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Appearance and Odor:	Dark brown liquid with aromatic odor		
Flash Point:	>399° F	Lower Explosive Limit:	Not Applicable
Method Used:	TCC	Upper Explosive Limit:	Not Applicable
Evaporation Rate:	Unknown	Boiling Point:	>300° C
pH:	Unknown	Melting Point:	Not Applicable
Solubility in Water:	Insoluble, reacts	Specific Gravity:	1.22
Vapor Density:	8.5	Percent Volatile:	Unknown
Vapor Pressure:	0.00001 mm Hg @ 20° C		

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### SECTION 9: STABILITY AND REACTIVITY

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Thermal Stability:	Stable.
Hazardous Polymerization:	May occur from contact with water, alcohols, glycols or other materials containing active hydrogens.
Conditions to Avoid:	Contamination with water, alcohols, amines and strong bases.

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### SECTION 10: TRANSPORTATION

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Regulatory Agency:	Not Available
Proper Shipping Name:	Not Available
Hazard Classification:	Not Available
Identification Number:	Not Available
Labels Required:	Not Available
Other Requirements:	Not Available

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### SECTION 11: MISCELLANEOUS INFORMATION

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Additional Comments:	Medical supervision for all employees who handle or come in contact with respiratory sensitizers is recommended. Persons with recurrent skin eczema or skin allergies should be evaluated for their suitability for working with this product.
Date of Previous MSDS:	Not applicable. New product
Changes Since Previous MSDS:	Not applicable
Telephone Number for Additional Information:	(317) 575-7190

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### DISCLAIMER

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