

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: MR-710 Adhesive

Chemical Name: Polyurethane Adhesive

Product Use/Class: Adhesive for Rubber Flooring / Mixture

Company Information: Mannington Mills, Inc.
P.O. Box 30 - Route 45
75 Mannington Mills Road
Salem, New Jersey 08079

Phone Numbers: General: (856) 935-3000
Product Emergency: (866) 359-5602
Spill Response: (800) 424-9300

Effective Date: May 10, 2010

Supersedes Date: New

Reason for Revision: N/A

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight, %	Exposure Guidelines				Other
			ACGIH - TLV		OSHA - PEL		
			TWA	STEL	TWA	Ceiling	
Diphenylmethane-4,4'-diisocyanate (MDI)	101-68-8	0.1 - 1					

SECTION 3 - HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

Form: Liquid, Paste
Color: Tan
Odor: Mild

WARNING STATEMENTS

WARNING! CAUSES EYE, SKIN, RESPIRATORY AND GASTROINTESTINAL TRACT IRRITATION. MAY BE HARMFUL IF INHALED. KEEP CHILDREN AND PETS OUT OF WORK AREAS AND AWAY FROM PRODUCT DURING USE AND HANDLING. KEEP AWAY FROM ALL SOURCES OF IGNITION. AVOID PROLONGED EXPOSURE TO HEAT. STORE PRODUCT IN TIGHTLY CLOSED CONTAINER AWAY FROM THE REACH OF CHILDREN AND PETS.

Contact with this material can cause irritation to the skin, eyes and mucous membranes. Thermal decomposition or fire may produce toxic fumes and cause closed containers to rupture. Avoid breathing vapors. This product contains a respiratory and skin sensitizer. Prolonged inhalation or repeated skin contact may cause sensitization, allergic reactions, dermatitis and permanent respiratory damage.

- **Avoid contact with skin, eyes, and clothing.**
- **Wash thoroughly after handling.**
- **Keep container tightly closed when not in use and during storage.**

POTENTIAL HEALTH EFFECTS

Primary Routes of Exposure:

- **Routes of entry for paste include eye, skin contact, and ingestion.**
- **Routes of entry for gases include inhalation and eye contact.**

Acute: Based on the properties of the isocyanate compounds and considering toxicological data on similar products, this product may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the occupational exposure limit. Repeated inhalation may lead to a permanent respiratory disability.

Assessment of Diphenylmethane-4,4'-diisocyanate (MDI):

- Moderately toxic after short-term inhalation.
- Virtually nontoxic after a single ingestion.
- Virtually nontoxic after a single skin contact.
- Irrespective of this assessment, substance is classified as toxic due to its carcinogenic potential.

Irritation: Irritating to eyes, respiratory system and skin. Prolonged or repeated contact may result in dermatitis.

Information on: Diphenylmethane-4,4'-diisocyanate (MDI)

Irritating to eyes, respiratory system and skin.

Sensitization: May cause sensitization by inhalation and skin contact.

Information on: Diphenylmethane-4,4'-diisocyanate (MDI)

The substance may cause sensitization of the respiratory tract.

Sensitization after repeated skin contact is possible.

Repeated Dose Toxicity: Signs and symptoms of overexposure to this product include headache, vomiting, irritation of upper respiratory tract, chest tightness, breathing difficulty, coughing, sore throat, skin irritation and/or diarrhea. This product contains Methylene Diphenyl Isocyanate (MDI) which is a potential skin sensitizer and has been shown to alter cells in certain experiments. Although inconclusive, these cellular changes may indicate potential carcinogenicity. Risk to your health depends on duration and concentration of exposure.

Refer to Section 11 for toxicological information.

SECTION 4 - FIRST AID MEASURES

If in Eyes: Flush with copious amounts of water for at least 15 minutes. If symptoms persist, seek medical advice.

If on Skin: Flush with copious amounts of water while removing contaminated clothing. If skin irritation persists, call a physician and seek medical advice.

If Inhaled: Remove victim to fresh air and away from exposure immediately. If not breathing, give artificial respiration. Seek medical attention.

If Swallowed: If the material is swallowed, get immediate medical advice. Do not induce vomiting unless advised to do so by a physician or poison control center. Never give anything by mouth to an unconscious or convulsing person.

Notes to Physician:

1. Provide general supportive measures and treat symptomatically.
2. **Eyes:** Stain for evidence of corneal injury. If cornea is burned, apply antibiotic/steroid preparation as needed.
3. **Skin:** This product contains a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn.
4. **Inhalation:** This material contains a known pulmonary sensitizer. Any individual experiencing dermal or pulmonary sensitization should be removed from exposure to any diisocyanate. May aggravate existing heart conditions, particularly those with abnormal rhythms.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: >500 deg F (>260 deg C)

Lower Explosive Limit (LEL) %: Unknown

Upper Explosive Limit (UEL) %: Unknown

Auto-Ignition Temperature: N.A.

OSHA Flammability Classification:

Hazardous Products of Combustion: Carbon dioxide, carbon monoxide, low molecular weight hydrocarbons, oxides of nitrogen, and amines.

Extinguishing Media: Carbon dioxide, dry extinguishing media, foam, water fog.

Unusual Fire and Explosion Hazards: Burning produces harmful and toxic fumes (hydrogen cyanide under fire conditions).

Fire Fighting Equipment: Wear full protective clothing and self-contained breathing apparatus.

Miscellaneous Advice: Sealed containers should be protected against heat as this results in pressure build-up. Keep containers cool by spraying with water, if exposed to fire.

Refer to Section 10 for additional information.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective clothing. Avoid contact with skin, eyes and clothing.

Environmental Precautions: Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods for Clean-up: Dike spillage. Scrape up spilled product. Pick up with inert absorbent material (if possible). Dispose of absorbed material in accordance with all Local, State, Federal and/or Provincial regulations.

Refer to Section 13 for disposal information.

Refer to Sections 14 and 15 for reportable quantity information.

SECTION 7 - HANDLING AND STORAGE

Handling: Do not get this material in your eyes, on your skin, or on your clothes. Wash hands after handling and before eating. Wear respiratory protection if the material is heated, sprayed or used in a confined space. Keep away from sources of ignition. Do not smoke while handling or using this product, or in any nearby work areas with open containers of this product. Ensure thorough ventilation of work area where handling and using this material.

Storage: Store product in tightly closed container away from the reach of children and pets. Do not smoke in areas where this product or any other chemicals may be stored. Do not consume food or beverages anywhere that this product is stored.

Consult the Mannington Professional Installation Handbook for additional information on handling and storage.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Provide local and general exhaust ventilation to effectively remove and prevent build-up of any vapors or mists generated when using this product .

Respiratory Protection: Avoid breathing vapor and/or mists. Wear respiratory protection, NIOSH-certified (or equal) respirator, if ventilation is inadequate.

Eye Protection: Wear safety glasses with side-shields; wear face shield if splashing hazard exists.

Hand and Skin Protection: Wear chemical-resistant protective gloves and impermeable protective clothing.

Other Protective Equipment: Precautions must be taken so that persons handling isocyanates do not breathe the vapors or have the product come in contact with eyes or skin.

Components with Workplace Control Parameters:

Diphenylmethane-4,4'-diisocyanate (MDI) - OSHA

CLV 0.02 ppm 0.2 mg.m³

Diphenylmethane-4,4'-diisocyanate (MDI) - ACGIH

TWA value 0.005 ppm

Hygienic Practices: *Always wash hands before eating, smoking or using toilet facilities. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.*

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Tan Paste

Physical State: Liquid

Melting Point: No data available

Boiling Point: No data available

Density:

Vapor Density: Heavier than air

Specific Gravity: 1.65 (*Water = 1.0*)

Solvent Solubility: Slightly Soluble

Volatiles (Wt. %): 100 % Solids

VOC (Grams per Liter): 0

Vapor Pressure: No data available

Evaporation Rate: N/A

pH: N.A.

Decomposition Temperature: Unknown

SECTION 10 - STABILITY AND REACTIVITY

Conditions to Avoid: Avoid prolonged exposure to heat.

Materials to Avoid: Avoid contact with strong oxidizers, strong alkalis, strong acids, alcohols, water, and metallic hydrides.

Stability: Chemically stable at normal recommended storage conditions.

Hazardous Reactions: Not likely, when stored and handled according to instructions.

Hazardous Polymerization: Hazardous polymerization can occur with elevated temperatures. Water can cause a slight reaction. Curing of product releases gases. If curing occurs inside a closed container, pressure build-up may result.

Hazardous Decomposition Products: Carbon Dioxide, carbon monoxide, low molecular weight hydrocarbons, oxides of nitrogen, amines, and hydrogen cyanide (under fire conditions).

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 (Oral): N.A.

Product LD50 (Dermal): N.A.

Product LC50:

Immediate (Acute) Effects: Can sensitize the skin and/or respiratory tract of allergic persons.

Delayed (Subchronic & Chronic) Effects: Carcinogenicity – MDI is not listed by the NTP, IARC or regulated by OSHA as a carcinogen; however it has been shown to alter cells in certain experiments. Although inconclusive, these cellular changes indicate potential carcinogenicity. Information on: Diphenylmethane-4,4'-diisocyanate (MDI) – Indication of possible carcinogenic effect in animals.

SECTION 12 - ECOLOGICAL INFORMATION

No data available for this product

SECTION 13 - DISPOSAL CONSIDERATIONS

US EPA RCRA Status:

Disposal Considerations:

Disposal Method:

Miscellaneous: Disposal should be done in accordance with all local, state, federal (40 CFR Part 261) or Provincial regulations. Be aware that state and local requirements differ widely depending on location and may in many cases be different from federal rules. Do not discharge into drains/groundwater.

SECTION 14 - TRANSPORT INFORMATION

The information provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transport.

DOT Proper Shipping Name:

DOT Hazard Class: Not regulated as hazardous goods.

DOT UN/NA Number:

Packing Group:

Emergency Response Guide Number:

Other: Sea Transport/Air Transport - Not regulated as hazardous goods.

SECTION 15 - REGULATORY INFORMATION

U.S. Federal Regulations:

Registration Status: TSCA, US released/listed

OSHA hazard Category: IARC 1, 2A or 2B, chronic target organ effects reported, SHA PEL established, ACGIH TLV established.

SARA Section 313: Acute, Chronic

CAS Number

101-68-8

Chemical Name

Diphenylmethane-4,4'-diisocyanate (MDI)

State Regulations:

CAS Number

101-68-8

Chemical Name

Diphenylmethane-4,4'-diisocyanate (MDI)

State

MA, NJ, PA

Toxic Substances Control Act:

Inventory Status:

Export Notification:

WHMIS status: Controlled

WHMIS labeling:



WHMIS classification: D2A - Other Toxic Effects - VERY TOXIC

SECTION 16 - OTHER INFORMATION

Hazard Ratings	Health	Fire	Reactivity	Additional Information
Suggested NFPA Rating				
Suggested HMIS Rating	2	1	0	

Disclaimer:

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date of hereof, the company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will the company be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

Legend:

N.E. - Not Established	S - Skin
N.A. - Not Available	ppm - Parts per Million
N/A - Not Applicable	° F. - Degrees Fahrenheit
C - Ceiling (Exposure Levels)	° C. - Degrees Centigrade
PEL - Permissible Exposure Limits	STEL - Short-Term Exposure Limit
OEL - Occupational Exposure Limit	CIH - Certified Industrial Hygienist
TSCA - Toxic Substances Control Act	TWA - Time Weighted Average
NFPA - National Fire Protection Association	
TLV - Exposure Limits Developed by ACCIH	
MSHA - Mine Safety and Health Administration	
NIOSH - National Institute for Occupational Safety	
OSHA - Occupational Safety and Health Administration	
HAZCOM - Hazard Communication Standard (29CFR1910.1200)	
ACGIH - American Conference of Government Industrial Hygienists	
CERCLA - Comprehensive Environmental Response, Comprehensive and Liability Act	