



MATERIAL SAFETY DATA SHEET

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PART-A-FOAM - Part A Foam

1. Product And Company Identification	
Supplier HENRY COMPANY 2270 Castle Harbor Place Ontario, CA 91761 Company Contact: R&D Dept. Telephone Number: (909) 947-7224 Web Site: www.resintechnology.com	Manufacturer HENRY COMPANY 2270 Castle Harbor Place Ontario, CA 91761 Company Contact: R&D Dept. Telephone Number: (909) 947-7224 Web Site: www.resintechnology.com
Supplier Emergency Contacts & Phone Number CHEMTREC: (800) 424-9300	Manufacturer Emergency Contacts & Phone Number CHEMTREC: (800) 424-9300
Issue Date: 04/23/2008 Product Name: PART-A-FOAM - Part A Foam Product Code: PART-A-FOAM	

2. Composition/Information On Ingredients			
Ingredient Name	CAS Number		Percent Of Total Weight
diphenylmethane diisocyanate (MDI) Mixed Isomers	26447-40-5		1 - 5
4,4'-diphenylmethane diisocyanate	101-68-8		30 - 60
polymeric diphenylmethane diisocyanate (pMDI)	9016-87-9		30 - 60

EMERGENCY OVERVIEW	
WARNING: Respiratory Sensitizer, Skin Sensitizer Reacts slowly with water to produce carbon dioxide, which may rupture closed containers. This reaction accelerates at higher temperatures. Appearance/Odor: Brown liquid, musty odor	

3. Hazards Identification
Primary Routes(s) Of Entry Skin Contact, Inhalation
Eye Hazards Causes irritation with symptoms of reddening, tearing, stinging, and swelling. May cause temporary corneal injury. Vapor or aerosol may cause irritation with symptoms of burning and tearing. Prolonged contact may cause conjunctivitis.
Skin Hazards Causes irritation with symptoms of reddening, itching, and swelling. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Cured material is difficult to remove. May cause skin discolorization. Prolonged contact can cause reddening, swelling, rash, and, in some cases, skin sensitization. Animal tests and other research indicate that skin contact with MDI can play a role in causing isocyanate sensitization and respiratory reaction.
Ingestion Hazards May cause irritation of the mouth, throat, and digestive tract. Symptoms may include abdominal pain, nausea, vomiting, and diarrhea.



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3. Hazards Identification - Continued

Inhalation Hazards

Short-term inhalation exposure to isocyanates can cause respiratory and mucous membrane irritation. Symptoms include eye and nose irritation, dry or sore throat, runny nose, shortness of breath, wheezing and laryngitis. Coughing with chest pain or tightness may also occur. These symptoms may occur during exposure or may be delayed several hours. High aerosol concentrations could cause inflammation of the lung tissue (chemical pneumonitis), chemical bronchitis with severe asthma-like wheezing, severe coughing spasms and accumulation of fluid in the lungs (pulmonary edema), which could prove fatal. Symptoms of pulmonary edema may not appear until several hours after exposure and are aggravated by physical exertion. Prolonged or repeated overexposure or a single large dose may cause certain individuals to develop sensitization to diisocyanates (asthma or asthma-like symptoms). Sensitization can be permanent. Chronic overexposure may cause lung damage (including fibrosis, decrease in lung function) that may be permanent.

4. First Aid Measures

Eye

In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin

Remove contaminated clothing and shoes. Wash clothing before reuse. Wash affected areas with soap and water. Get medical attention immediately if irritation (redness, rash, blistering) develops and persists.

Ingestion

DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious victim. Have victim rinse mouth thoroughly with water. If victim is fully conscious, give 1-2 cups of water to dilute material in stomach. Get medical attention immediately.

Inhalation

Remove the person from the contaminated area to fresh air. If breathing is difficult, give oxygen. Do not allow victim to move about unnecessarily. Symptoms of pulmonary edema or asthmatic symptoms may develop and may be immediate or delayed up to several hours. Get medical attention immediately.

5. Fire Fighting Measures

Flash Point: >230 °F

Flash Point Method: closed cup

Lower Explosive Limit: not available

Upper Explosive Limit: not available

Fire And Explosion Hazards

Special Remarks on Explosion Hazards

Due to reaction with water producing CO₂-gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Containers may burst if over heated.

Extinguishing Media

Use an extinguishing media suitable for surrounding fire.

Fire Fighting Instructions

Fire-fighters should wear NFPA compliant structural fire-fighting protective equipment, including self-contained breathing apparatus and helmet, hood, boots, and gloves. Avoid contact with product. Decontaminate equipment and protective clothing prior to reuse. If material is spilled or released and exposure likely, evacuate area and fight fire from a safe distance or a protected location.



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6. Accidental Release Measures

Immediately contact emergency personnel. Evacuate the area and keep upwind to avoid inhalation of vapors. Isolate the area and prevent access. Eliminate all ignition sources. Use appropriate personal protective equipment (PPE). Ventilate area. Contain spill to avoid runoff to waterways and sewers.

Cleanup should only be conducted by trained personnel.

Neutralize small spills with decontaminant. Remove and properly dispose of residue.

Contain and absorb large spills onto an inert, non-flammable absorbent carrier (such as earth or sand). Shovel into open-top drums or plastic bags for further decontamination, if necessary. Wash the spill area clean with liquid decontaminant. Test atmosphere for MDI.

Notify applicable governmental authorities if release is reportable. The CERCLA RQ for MDI is 5000 pounds.

7. Handling And Storage

Handling And Storage Precautions

Avoid breathing aerosols, mists and vapors. Keep containers tightly closed. Store in a cool, dry, well-ventilated area away from flammables and other non-compatible materials. Keep contents away from moisture. Inspect containers regularly for leakage or expired shelf life. Replace defective containers.

8. Exposure Controls/Personal Protection

Engineering Controls

Use with adequate ventilation. When used outdoors, stay well away from building air intakes or close the intakes to prevent product from entering building.

Eye/Face Protection

Safety glasses with side shields or goggles recommended. If there is a potential for splashing, use full face shield over safety glasses or goggles.

Skin Protection

Avoid all skin contact. Use with chemical-protective gloves and clothing to prevent excessive skin contact. Chemical-resistant gloves made of nitrile, neoprene or butyl rubber can be used. Animal tests and other research indicate that skin contact with MDI can play a role in causing isocyanate sensitization and respiratory reaction.

Respiratory Protection

The level of respiratory protection needed should be based on the evaluation of chemical exposures by a health or safety professional. If required, use a NIOSH-approved full face piece air purifying respirator with organic vapor cartridge or supplied air respirator.

Occupational Exposure Limits for individual ingredients (if available) are listed below.

Ingredient(s) - Exposure Limits

4,4'-diphenylmethane diisocyanate

ACGIH TLV-TWA 0.005 ppm

OSHA PEL-CEILING 0.02 ppm

9. Physical And Chemical Properties

Appearance

Brown liquid

Odor

Slightly musty



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9. Physical And Chemical Properties - Continued

Odor - Continued

Chemical Type: Mixture

Physical State: Liquid

Boiling Point: 208-300 °C

Specific Gravity: 1.24@25°C

Vapor Pressure: <0.0001mmHg@25°C

Vapor Density: 8.5

pH Factor: not determined

Solubility: Insoluble. Reacts with water.

10. Stability And Reactivity

Conditions To Avoid (Stability)

Stable at room temperature. Reacts slowly with water to produce carbon dioxide gas. This reaction accelerates at higher temperatures and may cause closed container to burst . Avoid high temperatures.

Incompatible Materials

Avoid contact with water, amines, alcohols, amines, acids, bases, metal compounds, phenols, mercaptans, urethanes, ureas, and surface active compounds.

Hazardous Decomposition Products

Combustion products may include hydrogen cyanide, carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke, isocyanate, isocyanic acid and other undetermined compounds.

By Reaction with Water: 4,4'-Methylene dianiline may be formed.

Conditions To Avoid (Polymerization)

Polymerization may occur at elevated temperatures in the presence of alkalis, tertiary amines and metal compounds.

11. Toxicological Information

Miscellaneous Toxicological Information

Toxicological testing has not been conducted for this product overall. Available toxicological data for individual ingredients are summarized below.

Ingredient(s) - Toxicological Data

4,4'-diphenylmethane diisocyanate

oral-rat LD50: >5,000 mg/kg

oral-mouse LD50: 2200 mg/kg

dermal-rabbit LD50: >5,000 mg/kg

inhal-rat LC50: 490 mg/m³ 4-hr exposure

inhal-rat LC50 >2,240 mg/m³ 1-hr exposure

polymeric diphenylmethane diisocyanate (pMDI)

oral-rat LD50: >5,000 mg/kg

dermal-rabbit LD50: >5,000 mg/kg

inhalation rat LC50: 0.49 mg/l (4 hour/hours)

12. Ecological Information

No specific information available.



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13. Disposal Considerations

Dispose in accordance with applicable federal, state and local government regulations. Incineration is the preferred method.

14. Transport Information

Ground or Water Domestic Voyage

Not Restricted if shipped in containers < 3,780 kg (8333 pounds)

May be restricted if shipped in containers > 3,780 kg (8333 pounds), above this weight call Henry to verify that it exceeds RQ:

US UN3082, RQ, Environmentally hazardous substance, liquid, n.o.s., (4,4' -Diphenylmethane Diisocyanate (MDI)), 9

Canada Not Restricted

IMDG Not Restricted

IATA Not Restricted

15. Regulatory Information

SARA Hazard Classes

Acute Health Hazard

Chronic Health Hazard

SARA Section 304 Reportable Quantity: 5000

SARA Title III - Section 313 Form "R"/TRI Reportable Chemical

Ingredient(s) - U.S. Regulatory Information

4,4'-diphenylmethane diisocyanate

SARA Title III - Section 313 Form "R"/TRI Reportable Chemical
polymeric diphenylmethane diisocyanate (pMDI)

SARA Title III - Section 313 Form "R"/TRI Reportable Chemical

Ingredient(s) - State Regulations

4,4'-diphenylmethane diisocyanate

New Jersey - Workplace Hazard

New Jersey - Environmental Hazard

Pennsylvania - Workplace Hazard

Massachusetts - Hazardous Substance

New York City - Hazardous Substance

polymeric diphenylmethane diisocyanate (pMDI)

New Jersey - Workplace Hazard

New Jersey - Environmental Hazard

New Jersey - Special Hazard

Canadian Regulatory Information

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. WHMIS Classification: D1A - Very Toxic, D2A - Very Toxic and D2B - Toxic

Ingredient(s) - Canadian Regulatory Information

4,4'-diphenylmethane diisocyanate



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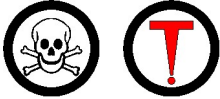
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15. Regulatory Information - Continued

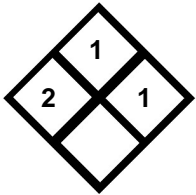
Ingredient(s) - Canadian Regulatory Information - Continued

WHMIS - Ingredient Disclosure List

WHMIS - Canada (Pictograms)



NFPA



HMIS

HEALTH	*2
FLAMMABILITY	1
REACTIVITY	1
PERSONAL PROTECTION	

16. Other Information

Revision/Preparer Information

This MSDS Supersedes A Previous MSDS Dated: 04/09/2008

Disclaimer

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