



MATERIAL SAFETY DATA SHEET  
**HIGH VELOCITY MEMBRANE  
 ADHESIVE II (HVMA-II) Part A**

WHMIS	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS
		Not regulated

**SECTION I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** High Velocity Membrane Adhesive II (HVMA-II) – Part A  
**Use:** Urethane Sealant

**Code of MSDS:** CA U DRU SS FS 090  
**Formula number:** Not applicable  
**Revision date:** June 27, 2006  
**Revised by:** Marie-Claude Fontaine, Health and safety Supervisor  
 (800) 567-1492  
[mcfontaine@soprema.ca](mailto:mcfontaine@soprema.ca)

**Distributor:** Soprema USA  
 310 Quadral Drive  
 Wadsworth (Ohio) 44281  
 UNITED STATES  
 Tel.: (800) 356-3521

**In case of emergency:**

SOPREMA (8:00am to 5:00pm – Eastern time): (800) 567-1492  
 CANUTEC (Canada) (24h.): (613) 996-6666  
 CHEMTREC (USA) (24h.): (800) 424-9300  
 Poison Control Centre: Consult local telephone directory

**EMERGENCY OVERVIEW!!!**

Yellow viscous liquid with negligible odour. May cause eye irritation. Skin contact: irritation, dermatitis. Ingestion of the product can cause gastrointestinal irritation. Inhalation of particulates and fumes may result in allergic respiratory sensitization.

**SECTION II. COMPOSITION AND INFORMATION ON DANGEROUS INGREDIENTS**

NAME	CAS #	% WEIGHT	EXPOSURE LIMIT (ACGIH)	
			TLV-TWA	TLV-STEL
<b>Polyurethane Polymer</b>	Trade secret	65.0 – 99.0	Not available	Not available
<b>Diphenylmethane diisocyanate (homopolymer)</b>	39310-05-9	5.0 – 10.0	Not available	Not available
<b>Methylenebis phenylisocyanate (MDI)</b>	101-68-8	1.0 – 5.0	0.005 ppm	Not available
<b>Methylene Bis (phenylisocyanate) isomers</b>	26447-40-5	< 1.0	0.005 ppm	Not available

**SECTION III. POTENTIAL HEALTH EFFECTS****HAZARDOUS HEALTH EFFECTS****INHALATION OF PARTICULATES (SPRAYING) AND FUMES:**

Irritation, coughing spell, wear mask if spraying. Inhalation of particulates and fumes may result in 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 IV. 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.

**SECTION V. FIRE-FIGHTING MEASURES**

**FLASH POINT:** > 350°F (177°C)

**METHOD:** PM cc

**FLAMMABILITY LIMITS IN AIR:** N/A

**AUTO-IGNITION TEMPERATURE:** Not established

**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.

**COMBUSTION PRODUCTS:**

Hydrocyanic acid, oxides of nitrogen can form, carbon monoxide, carbon dioxide.

**EXTINGUISHING MEDIA:** Dry chemical powder, CO<sub>2</sub> foam.

**OTHER PRECAUTIONS:** None

**SECTION VI. ACCIDENTAL RELEASE MEASURES****RELEASE OR SPILL:**

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 VII. HANDLING AND STORAGE****HANDLING AND STORAGE PRECAUTIONS:**

Store between 65°F – 85°F (18°C – 29°C). Avoid exposure to heat above 90°F (32°C). Prevent ingestion, and contact with skin and eyes. Keep container closed when not in use. Material will cure when exposed to atmospheric moisture.

**SECTION VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION****HANDS:** Wear chemical resistant gloves.**SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES**

<b>ODOUR:</b>	Negligible
<b>COLOR:</b>	Yellow
<b>PHYSICAL STATE:</b>	Viscous Liquid
<b>pH:</b>	N/A
<b>VAPOR PRESSURE:</b>	N/A
<b>VAPOR DENSITY:</b>	N/A
<b>BOILING POINT:</b>	N/A
<b>MELTING POINT:</b>	N/A
<b>FREEZING POINT:</b>	N/A
<b>SOLUBILITY IN WATER:</b>	N/A
<b>SPECIFIC GRAVITY:</b>	1.02
<b>% VOLATILE:</b>	< 0.15%

**SECTION X. STABILITY AND REACTIVITY**

<b>STABILITY:</b>	This material is stable.
<b>INCOMPATIBILITY:</b>	Avoid contact with water, acids, bases, alcohols, and metal compounds.
<b>CONDITIONS TO AVOID POLYMERIZATION:</b>	Hazardous polymerization will not occur.

**SECTION XI. TOXICOLOGICAL INFORMATION**

<b>EYES:</b>	See Section III.
<b>INGESTION:</b>	See Section III.
<b>INHALATION:</b>	See Section III.
<b>SKIN:</b>	See Section III.
<b>SUBCHRONIC:</b>	See Section III.
<b>CHRONIC:</b>	See Section III.

**SECTION XII. ECOLOGICAL INFORMATION**

<b>ECOTOXICOLOGICAL DATA:</b>	N/A
<b>CHEMICAL FATE:</b>	N/A

**SECTION XIII. DISPOSAL CONSIDERATIONS**

<b>RCRA CLASS:</b>	N/A
<b>DISPOSAL METHOD:</b>	Not regulated by RCRA. Dispose of in compliance with local, state, federal and provincial regulations.
<b>EPA REPORTABLE QUANTITIES:</b>	N/A

**SECTION XIV. TRANSPORT INFORMATION**

<b>DOT SHIPPING NAME:</b>	Not regulated.
<b>DOT HAZARD CLASS:</b>	N/A
<b>UN/NA NUMBER:</b>	N/A
<b>PACKAGING CLASS:</b>	N/A
<b>REPORTABLE QUANTITY (RQ):</b>	5000 Lbs      Methylenebis(phenylisocyanate) (MDI)

**SECTION XV. REGULATORY INFORMATION**

**WHMIS:** D2A: Very toxic material causing other effects.  
**TSCA STATUS:** On the TSCA Inventory.  
**OSHA STATUS:** Considered hazardous based on the following criteria: Irritant, Sensitizer.  
**TARGET ORGANS:** Liver, Blood, Reproductive, Lung, Skin, Spleen.

**OSHA HAZARDOUS COMPONENTS:**

Methylenebis Phenylisocyanate (101-68-8)  
 Not classified as a carcinogen with NTP, ACGIH, or IARC.  
 Nor regulated as a carcinogen with OSHA.  
 Classified by IARC in Group 3 (not classifiable as to its carcinogenicity to humans)

**SARA 311 RATINGS**

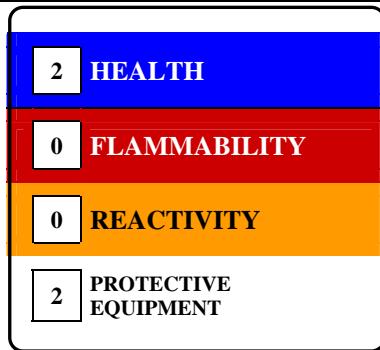
Immediate Health Hazard	Y
Delayed Health Hazard	Y
Fire Hazard	N
Reactivity Hazard	N
Sudden Release of Pressure Hazard	N

**SARA 313 INGREDIENTS**

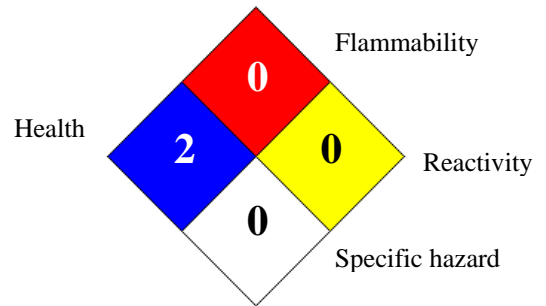
Methylene Bis (phenylisocyanate) (101-68-8)

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

**HMIS (USA):**



**NFPA (USA):**



**SECTION XVI. OTHER INFORMATION**

**Glossary:**

**ACGIH:** American Conference of Governmental Industrial Hygienists  
**ANSI:** American National Standards Institute  
**ASTM:** American Society for Testing and Materials  
**CAS:** Chemical Abstract Services  
**CFR:** Code of Federal Regulations (United States)  
**CSA:** Canadian Standardisation Association  
**DOT:** Department of Transportation (United States)  
**DSL:** Domestic Substances List (Canada)  
**EPA:** Environmental Protection Agency (United States)  
**HMIS:** Hazardous Material Information System  
**IARC:** International Agency for Research on Cancer  
**LC50:** (Lethal concentration<sub>50</sub>) Concentration of a substance in air that causes dead of 50% mortality of a defined animal population  
**LD50:** (Lethal dose<sub>50</sub>) Single dose of a substance that, when administrated by a define route in an animal assay, is expected to cause the death of 50% of a defined animal population.  
**NFPA:** National Fire Protection Association (United States)  
**NIOSH:** National Institute for Occupational Safety and Health  
**NTP:** National Toxicology Program  
**OSHA:** Occupational Safety & Health Administration (United States)  
**PEL:** Permissible Exposure Limit  
**RCRA:** Resource Conservation and Recovery Act (United States)  
**RTECS:** Registry of Toxic Effects of Chemical Substances  
**TDG:** Transportation of Dangerous Goods  
**TLV:** Threshold Limit Value  
**TWA:** Time-weighted average  
**TSCA:** Toxic Substances Control Act (United States)  
**WHMIS:** Workplace Hazardous Materials Information System (Canada)

**SECTION XVI. OTHER INFORMATION**

**References:**

Material Safety Data Sheet of supplier

**This MSDS has been prepared by:** Marie-Claude Fontaine  
**For more information:** SOPREMA Canada 1-800-567-1492

The Material Safety Data Sheets of SOPREMA Canada are available on Internet at the following site: <http://www.soprema.ca>

**Justification of the update:**

- New product.

This MSDS contains all the information required by ANSI Z-400.1-1998 standard (United States), by regulation 29 CFR Part 1910.1200 of the Hazard Communication Standard of OSHA, and is in accordance with standard DORS/88-66 OF WHMIS Canada.

**FOR INDUSTRIAL USE ONLY. Keep out of reach of children. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier or any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**



**MATERIAL SAFETY DATA SHEET**  
**HIGH VELOCITY MEMBRANE**  
**ADHESIVE II (HVMA-II) Part B**

WHMIS	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS
		<p>Not regulated</p>

**SECTION I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** High Velocity Membrane Adhesive II (HVMA-II) – Part B  
**Use:** Sealant

**Code of MSDS:** CA U DRU SS FS 091  
**Formula number:** Not applicable  
**Revision date:** June 27, 2006  
**Revised by:** Marie-Claude Fontaine, Health and safety Supervisor  
 (800) 567-1492  
[mcfontaine@soprema.ca](mailto:mcfontaine@soprema.ca)

**Distributor:** Soprema USA  
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 UNITED STATES  
 Tel.: (800) 356-3521

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 CHEMTREC (USA) (24h.): (800) 424-9300  
 Poison Control Centre: Consult local telephone directory

**EMERGENCY OVERVIEW!!!**

Black viscous liquid with negligible odour. May cause damage to eyes. Skin contact: irritation, dermatitis. Ingestion of the product can cause gastrointestinal irritation. Inhalation of particulates and fumes may cause irritation and coughing spell.

**SECTION II. COMPOSITION AND INFORMATION ON DANGEROUS INGREDIENTS**

NAME	CAS #	% WEIGHT	EXPOSURE LIMIT (ACGIH)	
			TLV-TWA	TLV-STEL
2-Ethyl 1,3-hexanediol	94-96-2	5.0 – 20.0	Not available	Not available

**SECTION III. POTENTIAL HEALTH EFFECTS****HAZARDOUS HEALTH EFFECTS****INHALATION OF PARTICULATES (SPRAYING) AND FUMES:**

Irritation, coughing spell, wear mask if spraying.

**EYES:** May cause damage to eyes.**INGESTION:** Can cause gastrointestinal irritation.**SKIN:** Can cause irritation, Dermatitis**SECTION IV. FIRST AID MEASURES****INHALATION:**

Leave area to breathe fresh air. 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 soap and water. If irritation, rash or other disorders develop, get medical attention immediately.

**SECTION V. FIRE-FIGHTING MEASURES****FLASH POINT:** > 350°F (177°C)**METHOD:** PM cc**FLAMMABILITY LIMITS IN AIR:** 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 avoid exposure to fumes using accepted fire fighting techniques. Wear proper firefighting gear including but not limited to SCBA.

**COMBUSTION PRODUCTS:**

Oxides of nitrogen, carbon monoxide, carbon dioxide, and other hydrocarbons.

**SECTION VI. ACCIDENTAL RELEASE MEASURES****RELEASE OR SPILL:**

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

**SECTION VII. HANDLING AND STORAGE****HANDLING AND STORAGE PRECAUTIONS:**

Store between 65°F – 85°F (18°C – 29°C). Avoid exposure to heat above 90°F (32°C). Prevent ingestion, and contact with skin and eyes. Keep container closed when not in use. Material will cure when exposed to atmospheric moisture.

**SECTION VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION****HANDS:** Wear chemical resistant gloves.**SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES****ODOUR:** Negligible**COLOUR:** Black**PHYSICAL STATE:** Viscous Liquid**pH:** N/A

**SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES**

<b>VAPOUR PRESSURE:</b>	N/A
<b>VAPOUR DENSITY:</b>	N/A
<b>BOILING POINT:</b>	N/A
<b>MELTING POINT:</b>	N/A
<b>FREEZING POINT:</b>	N/A
<b>SOLUBILITY IN WATER:</b>	N/A
<b>SPECIFIC GRAVITY:</b>	0.90
<b>% VOLATILE:</b>	< 0.15%

**SECTION X. STABILITY AND REACTIVITY**

<b>STABILITY:</b>	This material is stable.
<b>INCOMPATIBILITY:</b>	Avoid moisture to protect product quality.
<b>CONDITIONS TO AVOID POLYMERIZATION:</b>	Hazardous polymerization will not occur.

**SECTION XI. TOXICOLOGICAL INFORMATION**

<b>EYES:</b>	See Section III.
<b>INGESTION:</b>	See Section III.
<b>INHALATION:</b>	See Section III.
<b>SKIN:</b>	See Section III.
<b>SUBCHRONIC:</b>	See Section III.
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**SECTION XII. ECOLOGICAL INFORMATION**

<b>ECOTOXICOLOGICAL DATA:</b>	N/A
<b>CHEMICAL FATE:</b>	N/A

**SECTION XIII. DISPOSAL CONSIDERATIONS**

<b>RCRA CLASS:</b>	N/A
<b>DISPOSAL METHOD:</b>	Not regulated by RCRA. Dispose of in compliance with local, state, federal and provincial regulations.
<b>EPA REPORTABLE QUANTITIES:</b>	N/A

**SECTION XIV. TRANSPORT INFORMATION**

<b>DOT SHIPPING NAME:</b>	Not regulated.
<b>DOT HAZARD CLASS:</b>	N/A
<b>UN/NA NUMBER:</b>	N/A
<b>TRANSPORTATION NOTES:</b>	N/A
<b>REPORTABLE QUANTITY (RQ):</b>	N/A

**SECTION XV. REGULATORY INFORMATION**

**WHMIS:** D2A: Very toxic material causing other effects.  
**TSCA STATUS:** On the TSCA Inventory.  
**OSHA STATUS:** Considered hazardous based on the following criteria: Irritant.  
**TARGET ORGANS:** Eyes.

**OSHA HAZARDOUS COMPONENTS:**  
 None

Compliance Quantities: N/A

**SARA 311 RATINGS**

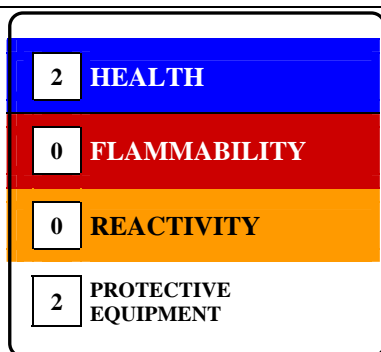
Immediate Health Hazard	Y
Delayed Health Hazard	Y
Fire Hazard	N
Reactivity Hazard	N
Sudden Release of Pressure Hazard	N

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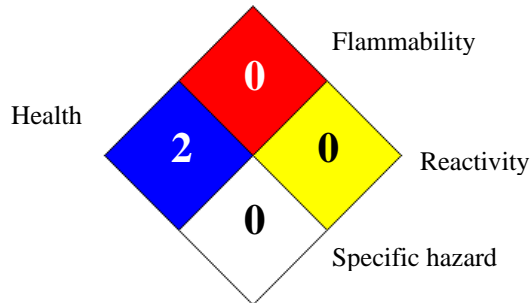
None

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**HMIS (USA):**



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