



MATERIAL SAFETY DATA SHEET  
**COLPHENE LIQUID  
 MEMBRANE**

HMIS	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS								
<table border="1"> <tr><td>2</td><td>HEALTH</td></tr> <tr><td>1</td><td>FLAMMABILITY</td></tr> <tr><td>1</td><td>REACTIVITY</td></tr> <tr><td>B</td><td>PROTECTIVE EQUIPMENT</td></tr> </table>	2	HEALTH	1	FLAMMABILITY	1	REACTIVITY	B	PROTECTIVE EQUIPMENT		<p><b>NOT REGULATED</b></p>
2	HEALTH									
1	FLAMMABILITY									
1	REACTIVITY									
B	PROTECTIVE EQUIPMENT									

**SECTION II. CHEMICAL PRODUCT AND COMPANY INFORMATION**

<b>Product name:</b>	Colphene Liquid Membrane
<b>Use:</b>	Lap and flashing adhesive
<b>Manufacturer:</b>	Soprema, Inc. 310 Quadral Drive Wadsworth, Ohio 44281 UNITED STATES
<b>Distributor:</b>	Soprema, Inc. 310 Quadral Drive Wadsworth, Ohio 44281 UNITED STATES
<b>In case of emergency:</b>	SOPREMA (8:00am to 5:00pm - Eastern time): (800) 356-3521 CHEMTREC (USA) (24h.): (800) 424-9300 CANUTEC (Canada): (613) 996-6666 International: (703) 527-3887

**EMERGENCY OVERVIEW!!!**

**This product is harmful by inhalation, when in contact with the skin and if it is swallowed. This product may cause sensitization by inhalation and skin contact. Repeated inhalation of vapors may cause an allergic respiratory response, the onset of which may be delayed several hours after exposure. Avoid contamination. Water reacts with product liberating CO2 gas.**

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

Component	CAS#	% by weight
Polyurethene polymer	Not available	40-60
Methylene bisphenol isocyanate (MDI)	101-68-8	15-40
Diisodecyl phthalate (mixed isomers)	68515-49-1	10-30
1,1'-Methylenebis (isocyanato-) benzene	26447-40-5	5-10
Benzene, 1,1'-methylenebis[isocyanato-, homopolymer	39310-05-9	1-5
Dimethyl silicone polymer with silica	67762-90-7	1-5

**Component Information/Information on Non-Hazardous Components**

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

This material is a controlled product under Canadian WHMIS regulations.

**SECTION III. POTENTIAL HEALTH EFFECTS****Potential Health Effects: Eyes**

This product is irritating to the eyes. Symptoms include itching, burning, redness and tearing.

**Potential Health Effects: Skin**

This product is irritating to the skin. This product may cause an allergic skin reaction.

**Potential Health Effects: Ingestion**

Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Potential Health Effects: Inhalation**

Allergic lung reaction such as asthma, which includes coughing, wheezing, chest pain and tightness, difficulty breathing and shortness of breath; irritation of the upper respiratory tract, which includes burning of mouth, throat, and chest.

**SECTION IV. FIRST AID MEASURES**

<b>SKIN</b>	Wash exposed skin with soap and water. If irritation develops or persists, seek medical attention. Contaminated leather articles, including shoes, that cannot be decontaminated should be discarded.
<b>EYES</b>	Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.
<b>INHALATION</b>	Move affected individual to an area free of risk from further exposure. Administer oxygen or artificial respiration as needed. Immediate or delayed asthma-like symptoms may develop. Obtain medical attention.
<b>INGESTION</b>	If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions.

**SECTION V. FIRE-FIGHTING MEASURES**

<b>GENERAL FIRE HAZARDS</b>	See Section 9 for Flammability Properties. Cool containers with water spray. Containers may burst if overheated. This product reacts with water producing CO <sub>2</sub> gas. Do not reseal contaminated containers as a hazardous pressure build up could result in container rupture.
<b>HAZARDOUS COMBUSTION PRODUCTS</b>	Combustion products may include carbon oxides, nitrogen oxides, hydrocarbons, HCN and isocyanates.
<b>EXTINGUISHING MEDIA</b>	Use methods for the surrounding fire.
<b>FIRE FIGHTING EQUIPMENT/INSTRUCTIONS</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.

**SECTION VI. ACCIDENTAL RELEASE MEASURES****Containment Procedures**

Wear appropriate personal protective equipment. Stop the flow of material, if this is without risk. Do not allow to drain to sewers.

**Clean-Up Procedures**

Ventilate the contaminated area. Absorb spill with inert material. Shovel material into appropriate container for further neutralization and disposal. Dispose of in accordance with federal, state and local regulations in a permitted waste management facility.

**Evacuation Procedures**

Evacuate the area promptly. Keep upwind of the spilled material and isolate exposure.

**Special Procedures**

Avoid inhalation of vapors or mists. Surfaces may become slippery after a spill.

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

Avoid contact with skin and eyes. Do not breathe vapors. Wear proper personal protective equipment. Avoid contact with water. Do not re-seal contaminated product as a hazardous build-up of pressure may result from liberation of CO<sub>2</sub> gas. Avoid contact with metals such as aluminum, brass, copper, galvanized metals, tin and zinc.

**STORAGE:**

Keep containers properly sealed in a cool, dry, well-ventilated area below 105F. Do not store in open, unlabeled or mislabeled containers. Do not reuse empty container without commercial cleaning or reconditioning.

**SECTION VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION****Component Exposure Limits****Methylene bisphenol isocyanate (MDI) (101-68-8)**

ACGIH: 0.005 ppm TWA

OSHA: 0.02 ppm Ceiling; 0.2 mg/m<sup>3</sup> Ceiling

NIOSH: 0.005 ppm TWA; 0.05 mg/m<sup>3</sup> TWA

0.020 ppm Ceiling (10 min); 0.2 mg/m<sup>3</sup> Ceiling (10 min)

<b>SKINS</b>	The use of neoprene, nitrile rubber or butyl rubber gloves is recommended.
<b>RESPIRATORY</b>	Use a NIOSH-approved organic vapor respirator to protect against inhalation of vapors. A respirator should be used if ventilation is unavailable, or is inadequate for keeping vapor levels below the applicable exposure limits.
<b>EYES</b>	Wear chemical goggles; add face shield (if splashing is possible).
<b>ENGINEERING CONTROLS</b>	Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
<b>GENERAL</b>	Eye wash fountain and emergency showers are recommended.

**SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES**

<b>PHYSICAL FORM</b>	Liquid	<b>AUTO IGNITION</b>	Not available
<b>APPEARANCE</b>	Straw-colored viscous liquid	<b>BURNING RATE</b>	Not available
<b>ODOR</b>	Negligible	<b>LOWER FLAMMABILITY LIMIT (LFL)</b>	Not available
<b>pH</b>	Not available	<b>UPPER FLAMMABILITY LIMIT (UFL)</b>	Not available
<b>VAPOR PRESSURE</b>	Not available	<b>FLASH POINT METHOD</b>	Pensky-Martin Closed Cup
<b>BOILING POINT</b>	Not available	<b>FLASH POINT</b>	> 200°F (93°C)
<b>VAPOR DENSITY</b>	Not available	<b>OCTANOL/H<sub>2</sub>O COEFF.</b>	Not available
<b>MELTING POINT</b>	Not available	<b>PERCENT VOLATILE</b>	< 0.15
<b>SOLUBILITY IN WATER</b>	Reacts with water	<b>VISCOSITY</b>	7500 cps @ 75°F
<b>SPECIFIC GRAVITY</b>	1.10	<b>VOC</b>	Not available
<b>EVAPORATION RATE</b>	Not available		

**SECTION X. STABILITY AND REACTIVITY****STABILITY:**

Stable at room temperature. Reaction with water (moisture) produces CO<sub>2</sub> gas. Exothermic reaction with materials containing active hydrogen groups.

**INCOMPATIBILITY:**

Water, alcohols, amines, bases and acids.

**HAZARDOUS DECOMPOSITION:**

Carbon oxides, nitrogen oxides, hydrocarbons, HCN and isocyanates.

**CONDITIONS TO AVOID:**

Avoid high temperatures. Avoid contact with water. Avoid contamination. Avoid contact with metals such as aluminum, brass, copper, galvanized metals, tin and zinc.

**POSSIBILITY OF HAZARDOUS REACTIONS:**

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

## SECTION XI. TOXICOLOGICAL INFORMATION

### Acute Dose Effects

#### A: General Product Information

This product is harmful by inhalation, when in contact with the skin and if it is swallowed. This product may cause sensitization by inhalation and skin contact. Repeated inhalation of vapors may cause an allergic respiratory response, the onset of which may be delayed several hours after exposure. This product is irritating to the eyes. Symptoms include itching, burning, redness and tearing. Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

#### B: Component Analysis - LD50/LC50

##### Methylene bisphenol isocyanate (MDI) (101-68-8)

Oral LD50 Rat: 9200 mg/kg

##### Diisodecyl phthalate (mixed isomers) (68515-49-1)

Oral LD50 Rat: >60000 mg/kg; Dermal LD50 Rabbit: 16000 mg/kg

##### 1,1'-Methylenebis (isocyanato-) benzene (26447-40-5)

Inhalation LC50 Rat: 0.369 mg/L/4H; Dermal LD50 Rabbit: >6200 mg/kg

### Repeated Dose Effects

Repeated or prolonged exposure to MDI may result in isocyanate sensitization (chemical asthma) in some individuals, causing them to react to isocyanate exposure at concentrations below the established exposure limits. Symptoms include chest tightness, wheezing, coughing, and shortness of breath. Effects can be delayed. Overexposure can cause lung damage, including decreased lung function. Prolonged or repeated skin contact may cause irritation leading to dermatitis. Skin sensitization may also occur.

Lung injury has been observed in laboratory animals after repeated excessive exposure to MDI/polymeric MDI aerosol droplets.

Lung tumors have been observed in laboratory animals exposed to aerosol droplets of MDI/polymeric MDI (6 mg/m) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects.

### Carcinogenicity

#### A: General Product Information

No additional information available.

#### B: Component Carcinogenicity

##### Methylene bisphenol isocyanate (MDI) (101-68-8)

IARC: Monograph 71 [1999], Supplement 7 [1987], Monograph 19 [1979] (Group 3 (not classifiable))

##### 1,1'-Methylenebis (isocyanato-) benzene (26447-40-5)

IARC: Monograph 71 [1999], Supplement 7 [1987], Monograph 19 [1979] (Group 3 (not classifiable))

## SECTION XII. ECOLOGICAL INFORMATION

### Ecotoxicity

#### A: General Product Information

No information available for the product. Product is immiscible with water.

#### B: Component Analysis - Ecotoxicity - Aquatic Toxicity

##### Diisodecyl phthalate (mixed isomers) (68515-49-1)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	> 1 mg/L	static
96 Hr LC50 Oncorhynchus mykiss	> 1 mg/L	static
96 Hr LC50 Lepomis macrochirus	> 0.55 mg/L	static
96 Hr EC50 Selenastrum capricornutum	> 1.3 mg/L	
48 Hr EC50 Daphnia magna	> 1 mg/L	
<b>1,1'-Methylenebis (isocyanato-) benzene (26447-40-5)</b>		
96 Hr EC50 Skeletonema costatum	3230 mg/L	
24 Hr EC50 Daphnia magna	> 1000 mg/L	

**SECTION XIII. DISPOSAL CONSIDERATIONS**

**US EPA Waste Number & Descriptions**

**A: General Product Information**

Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

**B: Component Waste Numbers**

No EPA Waste Numbers are applicable for this product's components.

**Disposal Instructions**

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

**SECTION XIV. TRANSPORTATION INFORMATION**

**US DOT Information**

**Shipping Name:** Not Regulated.

**TDG Information**

**Shipping Name:** Not Regulated.

**SECTION XV. REGULATORY INFORMATION**

**US Federal Regulations**

**A: General Product Information**

Components of this product have been checked against the non-confidential TSCA inventory by CAS Registry Number. Components not identified on this non-confidential inventory are either exempt from listing (i.e. polymers, hydrates) or are listed on the confidential inventory as declared by the supplier.

**B: Component Analysis**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

**Methylene bisphenol isocyanate (MDI) (101-68-8)**

SARA 313: 1.0 % de minimis concentration (listed under Chemical Category N120, Diisocyanates)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** No **Pressure:** Yes **Reactive:** Yes

**State Regulations**

**A: General Product Information**

Other state regulations may apply. Check individual state requirements.

**B: Component Analysis - State**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	CA	MA	MN	NJ	PA	RI
Methylene bisphenol isocyanate (MDI)	80-62-6	Yes	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):  
**WARNING!** This product contains a chemical known to the state of California to cause reproductive/developmental effects.

**Component Analysis - WHMIS IDL**

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Methylene bisphenol isocyanate (MDI)	101-68-8	0.1%

**WHMIS Classification:** D2A, D2B

**Additional Regulatory Information**

**A: General Product Information** No additional information available.

**B: Component Analysis - Inventory**

Component	CAS #	TSCA	CAN	EEC
Methylene bisphenol isocyanate (MDI)	101-68-8	Yes	DSL	EINECS
Diisodecyl phthalate (mixed isomers)	68515-49-1	Yes	DSL	EINECS
1,1'-Methylenebis (isocyanato-) benzene	26447-40-5	Yes	DSL	EINECS
Benzene, 1,1'-methylenebis[isocyanato-, homopolymer	39310-05-9	Yes	DSL	No
Dimethyl silicone polymer with silica	67762-90-7	Yes	DSL	No

## 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 death of 50% mortality of a defined animal population  
LD50: (Lethal dose<sub>50</sub>) Single dose of a substance that, when administered by a defined 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)

### Reference:

Supplier MSDS

This MSDS has been prepared by: SOPREMA, INC.  
For information: 800-543-3085

The Material Safety Data Sheets of SOPREMA are available on Internet at the following site: [HTTP://WWW.SOPREMA.US](http://WWW.SOPREMA.US)

### Justification of the update:

New MSDS.

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.

**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.**