# SAFETY DATA SHEET

#### Prepared according to USA OSHA Hazcom 2012 / Canada WHMIS 2015



**Date Prepared:** 09/09/2015

SDS No: XSMAR Part A SureMix Rigid Plastic Repair Adhesive\_ENG

**Date Revised:** 01/10/2018

**Revision No:** 4

# XSMAR Part A SureMix Rigid Plastic Repair Adhesive / Sealant - DISCONTINUED

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: XSMAR Part A SureMix Rigid Plastic Repair Adhesive / Sealant - DISCONTINUED

Product Description: Part A Black adhesive / sealant, 25 ml / 0.85 fl oz US

**General Use:** Urethane adhesive / sealant

**Product Stock/Code:** XSMAR / 440200 (Kit: 50 ml / 1.7 fl oz US) **Chemical Family:** Aromatic Isocyanate / Isocyanates aromatiques

Molecular Formula: Mixture / Mélange

#### Manufacturer / Supplier

Dominion Sure Seal Ltd. 6175 Danville Road, Mississauga Ontario, Canada L5T 2H7 Fax: 905-670-5174

www.dominionsureseal.com

**Customer Service:** 905-670-5411

# **Emergency Telephone Numbers (24 hour)**

CANUTEC: (613) 996-6666 CHEMTREC: (800) 424-9300

#### 2. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

The classification and label elements stated below were prepared in accordance with the USA OSHA Hazard Communication Standard (29 CFR 1910.1200; Hazcom 2012) and the Canadian WHMIS regulations (Hazardous Products Regulations; WHMIS 2015). This information may be different from the actual product label information for labels that are regulated by other agencies.

#### **Health hazards:**

Eye Irritation, Category 2
Skin Irritation, Category 2
Specific Target Organ Toxicity - Single Exposure, Category 3 (Respiratory Tract Irritation)
Respiratory Sensitization, Category 1
Skin Sensitization, Category 1
Specific Target Organ Toxicity - Repeated Exposure, Category 2
Carcinogenicity, Category 2

#### Physical hazards:

Not classified

#### Label elements

Hazardous components for labelling:

#### 4,4'-Diphenylmethane diisocyanate and Carbon Black

The following supplementary information may be included on the product label if this product is sold to the general public:

Contains isocyanates. May produce an allergic reaction.

Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter is used.







Signal Word: DANGER

# Hazard statement(s)

H319: Causes serious eye irritation.

H315: Causes skin irritation.

H335: May cause respiratory irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317: May cause an allergic skin reaction.

H373: May cause damage to respiratory system through prolonged or repeated exposure.

H351: Suspected of causing cancer.

# Precautionary statement(s)

#### Prevention:

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P264: Wash hands thoroughly after handling.

P272: Contaminated work clothing should not be allowed out of the workplace.

P260: Do not breathe vapours.

P271: Use only outdoors or in a well-ventilated area.

P284: In case of inadequate ventilation wear respiratory protection.

P280: Wear protective gloves, protective clothing and eye protection.

#### Response:

P308+P313: IF exposed or concerned: Get medical advice/ attention.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P302+P350: IF ON SKIN: Gently wash with plenty of soap and water.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

# Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

#### Disposal:

P501: Dispose of contents/container in accordance with applicable local, regional and/or national regulations.

Hazards Not Otherwise Classified: No data available.

#### **Emergency Overview**

**Immediate concerns:** May irritate the eyes, skin and respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged or repeated overexposure may cause lung damage. May cause sensitization by skin contact. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Suspected of causing cancer.

**Comments:** See sections 9 and 10 for more detailed information on physicochemical effects.

See section 11 for more detailed information on health effects.

See sections 12 for more detailed information on environmental effects.

The actual container label may not include the above label elements. The labeling shown above applies to products used solely for industrial / professional use.

Consumer products should be labeled in accordance with the Canadian Consumer Chemicals and Containers Regulations and US Consumer Product Safety Commission regulations. Consumer product labeling takes precedence over Canadian WHMIS 2015 and OSHA Hazcom 2012 Hazard Communication labeling.

#### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS number
4,4'-Diphenylmethane diisocyanate	40 - 50	101-68-8
Polymeric diphenylmethane diisocyanate	35 - 45	9016-87-9
Diphenylmethane diisocyanate, mixed isomers	5 - 15	26447-40-5
Carbon Black	0.5 - 1	1333-86-4

**Comments:** There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the product and hence require reporting in this section.

#### 4. FIRST AID MEASURES

**Eye Contact:** In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at least 15 minutes. Get medical attention, if irritation persists.

**Skin Contact:** Wash with soap and water. Get medical attention if irritation develops or persists. Remove contaminated clothing and wash before reuse.

**Ingestion:** Do not induce vomiting. Rinse mouth with water. Give 1 to 2 glasses of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

**Inhalation:** If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain medical attention if breathing difficulty persists.

## Signs and Symptoms of Overexposure

**Eye Contact:** Product liquid, aerosols or vapours are irritating. Can cause tearing, reddening and swelling. May cause temporary corneal injury.

**Skin Contact:** Contact causes skin irritation. Cured material is difficult to remove. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash.

**Ingestion:** Substance may be harmful if swallowed. May cause irritation. Symptoms of ingestion may include abdominal pain, nausea, vomiting and diarrhea.

**Inhalation:** High vapor concentrations may be harmful if inhaled. Vapour/mists at concentrations above the exposure limits can irritate (burning sensation) the mucous membranes in the respiratory tract. This can cause a runny nose, sore throat, coughing, chest discomfort, difficult breathing and reduced pulmonary functioning. Persons with pre-existing, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV with similar symptoms as well as asthma attack. Exposure well above the TLV or PEL may lead to bronchitis, bronchial spasm and pulmonary edema. Chemical or hypersensitive pneumonitis, with flu-like symptoms has also been reported. These symptoms can be delayed up to several hours after exposure. Effects are usually

reversible.

**Notes to Physician:** Respiratory: This compound is a known pulmonary sensitizer. Treatment is essentially symptomatic. An individual having a skin or pulmonary sensitization reaction to this material should be removed from exposure to any isocyanate. Skin: This compound is a known skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burns.

Additional Information: No data available.

#### 5. FIRE FIGHTING MEASURES

Flammable Properties: Will burn if involved in a fire.

**Extinguishing Media:** Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material. Use an extinguishing agent suitable for the surrounding fire.

**Hazardous Combustion Products:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Carbon dioxide, carbon monoxide. Nitrous gases, fumes/smoke, isocyanate, vapour.

Fire Fighting Procedures: Containers can build up pressure if exposed to heat (fire).

**Fire Fighting Equipment:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

**Sensitivity to Static Discharge:** Product is not sensitive to static discharge.

Sensitivity to Mechanical Impact: Product is not sensitive to mechanical impact.

#### 6. ACCIDENTAL RELEASE MEASURES

**Small Spill:** Cover spill area with suitable absorbent material (e.g., sand, earth, sawdust, vermiculite, Oil-Dri, Kitty Litter, etc.). Saturate absorbent material with neutralizing solution. Add an additional layer of absorbent material. Use shovel to move absorbent material around to ensure that all spilled material comes in contact with the neutralizing solution. Shovel all absorbed material into an appropriate salvage drum. Allow to stand (covered loosely) for 48 to 72 hours, to allow any gases to escape. Decontaminate spill area with neutralizing solution. Area can then be washed with soap and water. Recommended portion is ten parts neutralizing solution to one part spilled material. Suggested neutralization solution: 90% water + 5% concentrated ammonia + 5% detergent (dish soap).

#### **Environmental Precautions**

Water Spill: Do not discharge into drains/surface waters/groundwater.

Land Spill: Avoid runoff into storm sewers and ditches which lead to waterways.

**Special Protective Equipment:** Clean up spills immediately, observing precautions in Protective Equipment section 8.

# 7. HANDLING AND STORAGE

**General Procedures:** Ensure thorough ventilation of stores and work areas. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapour or spray mist. Warning properties (irritation of the eyes, nose and throat or odour) are not adequate to prevent chronic overexposure from inhalation. Handle in accordance with good industrial hygiene and safety practices.

**Handling:** Use only in a well ventilated area. Wear recommended personal protective equipment. Keep container closed when not in use. Avoid breathing vapours or mist. Avoid contact with eyes, skin, and clothing. After handling, always wash hands thoroughly with soap and water.

**Storage:** Store away from heat, sparks, open flames, strong oxidizing agents and direct sunlight. Protect from physical damage. Protect against moisture. Keep container tightly closed and in a well-ventilated place. Store in a cool dry place.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines** 

OSHA / WHMIS 2015 HAZARDOUS COMPONENTS				
	Occupational Exposure Limits			
Chemical Name	Type ppm mg/m <sup>3</sup>			mg/m³
	OSHA PEL	STEL	0.02	0.2
4.4! Diphonulmothano diigogyanata	ACGIH TLV	TWA	0.005	0.051
4,4'-Diphenylmethane diisocyanate	NIOSH REL	TWA	0.005	0.05
		STEL	0.02 [1]	0.2 [1]
	-	-	[2]	[2]
Polymeric diphenylmethane diisocyanate	Germany (DFG)	TWA	[3]	0.05 [3]
		STEL	[4]	0.05 [4]
Diphenylmethane diisocyanate, mixed isomers	-	-	[2]	[2]
	OSHA PEL	TWA		3.5
Carbon Black	ACGIH TLV	TWA	[5]	3.5 [5]
	NIOSH REL	TWA		3.5

#### Footnotes:

- 1. Ceiling limit value (10 min ).
- 2. This material does not have established exposure limits in the USA under OSHA, NIOSH, ACGIH.
- **3**. Inhalable fraction; 15 minutes average value.
- **4.** Inhalable fraction; 15 minutes average value. A momentary value of 0.1 mg/m<sup>3</sup> should not be exceeded.
- 5. Inhalable particulate matter.

**Engineering Controls:** Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

#### **Personal Protective Equipment**

**Eyes and Face:** Wear safety glasses with side shields (or goggles). Contact lenses should not be worn when working with this product. Eye wash fountains should be readily available to areas of use and handling.

**Skin Contact:** Chemical resistant gloves: butyl rubber, nitrile rubber, neoprene, PVC.

**Respiratory:** If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. Respirator type: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

**Protective Clothing:** Wear protective clothing as necessary to prevent contact. Wear long sleeves and trousers to prevent dermal exposure.

**Work Hygienic Practices:** Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse. Eye wash fountains and safety showers must be easily assessible. Do not breathe vapour/spray. Exposure levels must be monitored by accepted monitoring techniques to ensure that the TLV is not exceeded. Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrant skin eczema or sensitization should be excluded from working with isocyanates. Once a person is diagnosed as sensitized to an isocyanate, no further

exposure can be permitted. Employee education and training are important.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State : Liquid
Odor : Musty

Odor Threshold : Not Available

Appearance : Mobile liquid

Color : Black

pH : No data available.

**% Volatiles** : < 0.6 % w/w

Flash Point and Method : > 200 °C Closed Cup
Flammable Limits : No data available.

**Autoignition Temperature :** > 400°C (750°F)

**Notes:** 

**Vapor Pressure** : < 10<sup>-5</sup> mm Hg at 20°C

Vapor Density :>1

Boiling Point : No data available.

Melting Point : No data available.

Solubility in Water : Practically insoluble

**Evaporation Rate** 

(n-butyl acetate = 1) :> 1

**Density** : 1.23±0.02g/ml at 20°C

Viscosity :> 200 cps at 20°C

**VOC Content** : < 8 g/l (< 0.6% w/w)

Oxidizing Properties : None

**Comments:** 

# **VOC Compliance Statement**

**VOC Content:** Less Exempts: < 3.5 g/l (0.03 lb/gal), Part A + B as applied

Total Material: < 3.5 g/l (0.03 lb/gal), Part A + B as applied

**Density:** 1.10 to 1.12 g/ml, Part A + B as applied

**Total Volatiles:** < 0.3% w/w, Part A + B as applied

**Exempt Content:** 0 % w/w; 0 % v/v

**VOC Regulation:** SCAQMD Rule 1168 -Adhesives & Sealants - California

**Coating Category:** Adhesive, All Other Adhesives

The product VOC content meets the 250 g/l limit for Adhesive, All Other Adhesives. The product also meets the small container exemption in the various Adhesives and Sealants district rules - packaged in  $\leq$  475 ml (16 fl oz) cartridges.

California compliant.

**VOC Regulation:** CARB, OTC – Consumer Product Regulations

**Coating Category:** General Purpose Adhesive

This product VOC content meets the 10% w/w limit for the General Purpose Adhesive category under the CARB, OTC Consumer Products Regulations.

50 State compliant.

#### 10. STABILITY AND REACTIVITY

**Reactive Hazard**: Yes

**Hazardous Polymerization:** Contact with moisture or other materials that react with isocyanates, or temperatures above 177 C, may cause polymerization.

**Stability:** Stable under normal conditions of use and storage.

**Conditions to Avoid:** Avoid moisture.

**Possibility of Hazardous Reactions:** Reacts with water, with formation of carbon dioxide. Risk of bursting. Reacts with alcohols, acids, alkalies and amines. Risk of exothermic reaction. Risk of violent reaction. Risk of polymerization.

**Hazardous Decomposition Products:** By fire and high heat: Carbon monoxide, Carbon dioxide, Oxides of nitrogen, Hydrogen cyanide, Isocyanates, Isocyanic acid, other undetermined compounds.

Incompatible Materials: Water, amines, strong bases, alcohols. Copper alloys.

#### 11. TOXICOLOGICAL INFORMATION

#### **Acute Toxicity**

Chemical Name	Oral LD <sub>50</sub> mg/kg(rat)	Dermal LD <sub>50</sub> mg/kg(rabbit)	Inhalation LC <sub>50</sub> mg/l
4,4'-Diphenylmethane diisocyanate	> 10,000	> 10,000	0.369(rat;4h - mist)
Polymeric diphenylmethane diisocyanate	49,000	> 9400 > 6200	0.49(rat;4h - mist)
Diphenylmethane diisocyanate, mixed isomers	No data available.	ata available. No data available. No da	
Carbon Black	> 15,400	> 3000	Not Applicable

**Acute Toxicity - Dermal LD**<sub>50</sub>: Based on available ingredient data, the classification criteria for Acute Dermal Toxicity are not met for this mixture. The calculated ATE is >2000 mg/kg.

**Acute Toxicity - Oral LD**<sub>50</sub>: Based on available ingredient data, the classification criteria for Acute Oral Toxicity are not met for this mixture. The calculated ATE is >2000 mg/kg.

**Acute Toxicity - Inhalation LC**<sub>50</sub>: Based on available ingredient data, the classification criteria for Acute Toxicity - inhalation are not met for this mixture. At room temperature, exposure to vapor is minimal due to low volatility. This product is not sprayed during application; no spray mist can be generated so this route of exposure does not apply.

**Notes:** < 5% of the mixture consists of an ingredient or ingredients of unknown acute toxicity. No additional toxicology information is available for this product itself. (See Component Toxicity Information). **Primary Routes of Entry:** 

Eye contact. Inhalation. Skin contact. Ingestion.

**Skin Irritation / Corrosion:** Contains: 4,4'-Diphenylmethane diisocyanate. Causes skin irritation. The mixture is classified as: Skin Irritant, category 2, based on summation of ingredient data (>10% ingredients classified as skin irritant, category 2). Persons previously sensitized can experience allergic skin reaction with symptoms of

reddening, itching, swelling, and rash.

Eye Irritation / Serious Eye Damage: Contains: 4,4'-Diphenylmethane diisocyanate. Contact causes serious eye irritation. The mixture is classified as: Eye Irritant, category 2, based on summation of ingredient data (>10% ingredients classified as eye irritant, category 2). Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.

**Respiratory / Skin Sensitizer:** Contains: 4,4'-Diphenylmethane diisocyanate. The mixture is classified as: Skin Sensitizer, category 1 based on ingredient data ( $\geq 0.1\%$  ingredients classified as a skin sensitizer, category 1 or sub-category 1A or  $\geq 1.0\%$  ingredients classified as a skin sensitizer, sub-category 1B). The mixture is classified as: Respiratory Sensitizer, category 1 based on ingredient data ( $\geq 0.1\%$  ingredients classified as a respiratory sensitizer, category 1 or sub-category 1A or  $\geq 1.0\%$  ingredients classified as a respiratory sensitizer, sub-category 1B).

May cause sensitization by inhalation and skin contact. As a result of previous repeated overexposure or a single large dose, certain individuals develop sensitization which will cause them to react to a later exposure to product at levels well below the TLV. Symptoms including chest tightness, wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed. There are reports that once sensitized, an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Sensitization can be permanent. Prolonged contact with this product can cause reddening, swelling, rash scaling or blistering. In those who have developed skin sensitization, these symptoms can develop as a result of contact with very small amount of the liquid material.

**Germ Cell Mutagenicity:** Based on available data, the classification criteria for Germ Cell Mutagenicity are not met for this mixture (< 0.1% ingredients classified as Germ Cell Mutagen, category 1A or 1B and < 1.0% ingredients classified as Germ Cell Mutagen, category 2).

# Carcinogenicity

Chemical Name	NTP status	IARC status	OSHA status	Other
4,4'-Diphenylmethane diisocyanate		3		
Polymeric diphenylmethane diisocyanate		3		
Diphenylmethane diisocyanate, mixed isomers		3		
Carbon Black		2B		A3 (ACGIH)

**Notes:** Contains: 4,4'-Diphenylmethane diisocyanate and Carbon Black. Carbon black is listed as Group 2B (possibly carcinogenic to humans). The European Commission (2012) has classified MDIs (CAS No. 101-68-8, 26447-40-5 and 9016-87-9) as Category 2, suspected human carcinogens. The mixture is classified as: Carcinogenicity, category 2 based on ingredient data using the applicable cut-off/concentration limits (≥ 0.1% ingredients classified as a Carcinogen, category 2).

**Reproductive Toxicity:** Based on available data, the classification criteria for Reproductive Toxicity are not met for this mixture (< 0.1% ingredients classified as Reproductive Toxicity, category 1 or 2).

Specific Target Organ Toxicity - Single Exposure: Contains: 4,4'-Diphenylmethane diisocyanate. The mixture is classified as: Specific Target Organ Toxicity - Single Exposure, category 3, based on summation of ingredient data using the applicable cut-off/concentration limits (≥ 20% summation of all ingredients classified as Specific Target Organ Toxicity - Single Exposure, category 3). Prolonged or excessive inhalation may cause respiratory tract irritation. Vapour/mists at concentrations above the exposure limits can irritate (burning sensation) the mucous membranes in the respiratory tract. This can cause a runny nose, sore throat, coughing, chest discomfort, difficult breathing and reduced pulmonary functioning. Persons with pre-existing, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV with similar symptoms as well as asthma attack.

**Specific Target Organ Toxicity - Repeated Exposure:** Contains: 4,4'-Diphenylmethane diisocyanate. The mixture is classified as: Specific Target Organ Toxicity - Repeated Exposure, category 2, based on ingredient data using the applicable cut-off/concentration limits (≥ 1.0% ingredients classified as Specific Target Organ Toxicity - Repeated Exposure, category 2). Prolonged inhalation may be harmful. Prolonged or repeated exposure may

cause lung damage, including a decrease in lung function. Possible risk of irreversible effects.

**Aspiration Hazard:** Based on available data, the classification criteria for Aspiration Hazard are not met for this mixture (< 10% ingredients classified as an Aspiration Hazard, category 1 and/or mixture viscosity > 20.5 mm<sup>2</sup>/s at 40 °C).

#### 12. ECOLOGICAL INFORMATION

Environmental Data: No data available.

Ecotoxicological Information: No data available.

Bioaccumulation/Accumulation: No data available.

Distribution: No data available.

Aquatic Toxicity (Acute): No data available.

Chemical Fate Information: No data available.

#### 13. DISPOSAL CONSIDERATIONS

**Disposal Method:** Comply with applicable local, state or international regulations concerning solid or hazardous waste disposal and/or container disposal. Do not discharge substance/product into sewer system.

**Product Disposal:** Empty containers retain product residue; observe all precautions for product. Decontaminate containers prior to disposal.

#### 14. TRANSPORT INFORMATION

# **DOT (Department of Transportation)**

**Proper Shipping Name**: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**Technical Name** : 4,4'-Diphenylmethane diisocyanate

**Primary Hazard Class/Division:** 9

UN/NA Number : 3082
Packing Group : III

#### Other Shipping Information:

These Regulations do not apply to the handling, offering for transport or transporting of less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., on a road vehicle or a railway vehicle.

#### Air (ICAO/IATA)

Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**Technical Name** : 4,4'-Diphenylmethane diisocyanate

UN/NA Number : 3082

**Primary Hazard Class/Division:** 9

Packing Group : III

Vessel (IMO/IMDG)

Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**Technical Name** : 4,4'-Diphenylmethane diisocyanate

UN/NA Number : 3082

**Primary Hazard Class/Division:** 9

Packing Group : III

Marine Pollutant : None

**Note:** With an inner packaging < 5.0 L, this product may be shipped as a Limited Quantity.

#### Canadian Transportation of Dangerous Goods Regulations

Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**Technical Name** : 4,4'-Diphenylmethane diisocyanate

UN/NA Number : 3082

**Primary Hazard Class/Division:** 9

Packing Group : III

#### **TDG Note:**

These Regulations do not apply to the handling, offering for transport or transporting of less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., on a road vehicle or a railway vehicle.

#### 15. REGULATORY INFORMATION

#### **UNITED STATES**

#### SARA Section 311/312 Hazard Categories

**311/312 Health Hazards:** Carcinogenicity, Eye Irritation, Respiratory Sensitization, Respiratory Tract Irritation, Skin Irritation, Skin Sensitization, Target Organ Toxicity (Repeated exposure)

# 311/312 Physical Hazards: None

Fire Hazard : No
Sudden Release of Pressure : No
Reactive Hazard : No
Product Acute Toxicity : Yes
Product Chronic Toxicity : Yes

#### **EPCRA Section 313 Toxic Chemicals**

Chemical Name	Wt.%	CAS number
4,4'-Diphenylmethane diisocyanate	40 - 50	101-68-8
Polymeric diphenylmethane diisocyanate	35 - 45	9016-87-9

#### **EPCRA Section 302 Extremely Hazardous Substances**

#### **EPCRA Status:**

This product contains no listed extremely hazardous substances that are subject to the reporting requirements of SARA Title III, Section 302.

#### CERCLA Hazardous Substances and Reportable Quantities (RQ)

Chemical Name	Wt.%	RQ
4,4'-Diphenylmethane diisocyanate	40 - 50	5,000

#### **TSCA (The Toxic Substances Control Act)**

#### **TSCA Status:**

All components are included or are otherwise exempt from inclusion on this inventory.

#### CAA 112(b) - Hazardous Air Pollutants

Chemical Name	Wt.%	CAS number
4,4'-Diphenylmethane diisocyanate	40 - 50	101-68-8

#### CAA 112(r) - List of Substances for Accidental Release Prevention:

This product contains no chemicals subject to CAA 112(r).

#### **California Proposition 65**

Chemical Name	Wt.%	Listed
Carbon Black	0.5 - 1	Cancer

## OSHA Hazard Communication Standard (29 CFR 1910.1200):

OSHA Status: Hazardous Product (See Section 2 for details).

This product has been classified in accordance with the hazard criteria of the USA OSHA Hazard Communication Standard (29CFR 1910.1200) and the Safety Data Sheet contains all the information required by the OSHA Hazard Communication Standard (HazCom 2012).

#### **CANADA**

#### WHMIS Hazard Symbol and Classification

See Section 2 for details.

#### WHMIS Regulatory Status:

This product has been classified in accordance with the hazard criteria of the Canadian Hazardous Products Regulations and the Safety Data Sheet contains all the information required by the Hazardous Products Regulations (WHMIS 2015).

#### WHMIS Classification:

WHMIS 2015 (Canada) Status: Hazardous Product (See Section 2 for details).

### **CEPA - National Pollutant Release Inventory (NPRI):**

Name	CAS No.	NPRI Part No.
4,4'-Diphenylmethane diisocyanate	101-68-8	1A, 5 (VOC)

#### Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL):

All components are included or are otherwise exempt from inclusion on this inventory.

Comments VOC Content -- See section 9.

#### 16. OTHER INFORMATION

Reason for Issue: Discontinued product

**Approved By:** Jim Gordon **Title:** R&D Chemist / Chemiste de R&D

**Prepared By :** Regulatory Compliance / Conformité réglementaire 

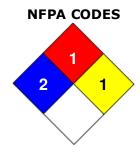
Date Revised: 01/10/2018

Information Contact: 905-670-5411

**Revision Summary:** This MSDS replaces the 05/10/2017 MSDS. Revised: **Section 1:** SDS No, Reason for

Issue.

# HMIS RATING HEALTH \* 2 FLAMMABILITY 1 PHYSICAL HAZARD 1 PERSONAL PROTECTION G



NFPA 30 / 30B Storage Classification: Combustible Liquid IIIB

Manufacturer Supplemental Notes: None

Data Sources: Not Available

#### **Additional SDS Information:**

N/AV Not Available N/AP Not Applicable ND Not yet determined

ACGIH American Conference of Governmental Industrial Hygienists

CAA The Clean Air Act

CCCR The Consumer Chemicals and Containers Regulations

CEPA The Canadian Environmental Protection Act

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

EPCRA The Emergency Planning and Community Right-To-Know Act

IARC International Agency for Research on Cancer

MSHA Mine Safety and Health Administration

NIOSH National Institute for Occupational Safety and Health

NTP National Toxicology Program

OSHA The Occupational Safety and Health Administration

SARA The Superfund Amendments and Reauthorization Act

WHMIS Workplace Hazardous Materials Information System

General Statements: None

Comments: None

**Manufacturer Disclaimer:** The information contained herein is based on data considered accurate. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. No responsibility is assumed for personal injury or property damage to vendees or users or third parties, caused by the material. Such vendees or users assume all risks with the use of this material.