

SAFETY DATA SHEET

Section 1: Identification

1.1 Product identifier:

THERMOSEAL A-SIDE

1.2 Recommended use:

Identified uses:

Raw material, Chemical intermediate in manufacture of polyurethane polymers.

Restrictions on use:

Consumer and domestic (household) uses

1.3 Supplier:

THERMOSEAL LLC

Po Box 32

New Canaan, CT 06840

Tel: 800-853-1577

www.thermosealusa.com

1.4 Emergency telephone number:

North America: Chemtrec 800-424-9300 (domestic)

Section 2: Hazard Identification

2.1 GHS Classification:

Skin Irritation Cat. 2; H315: Causes skin irritation.

Eye Irritation Cat. 2B; H320: Causes eye irritation.

Skin Sensitization Cat. 1; H317: May cause an allergic skin reaction.

Acute Toxicity-inhalation Cat. 4; H332: Harmful if inhaled.

Respiratory Sensitization Cat. 1; H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Specific Target Organ Toxicity Single Exposure Cat. 3; H335: May cause respiratory irritation.

Specific Target Organ Toxicity Repeated Exposure Cat. 2; H373: May cause damage to respiratory system through prolonged or repeated exposure by inhalation.

2.2 Label elements:



Danger.

Causes skin and eye irritation.

May cause an allergic skin reaction.

Harmful if inhaled.

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

May cause respiratory irritation.

May cause damage to respiratory tract through prolonged or repeated exposure by inhalation.

Prevention

Wash exposed skin thoroughly after handling.

Wear protective gloves, eye protection / face protection.

Do not breathe vapors / fume/ spray or dust.

Use only outdoors or in a well-ventilated area.

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

In case of inadequate ventilation wear respiratory protection.

Response

If on skin: Wash with plenty of soap and water.

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

Wash contaminated clothing before reuse.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

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Section 2: Hazard Identification, continued

2.2 Label elements: (continued)

If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a poison center or doctor if you feel unwell.
If experiencing respiratory symptoms: Call a poison center or doctor

Storage

Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal

Recycle and or dispose of contents/containers in accordance with local/regional/national/international regulations.

2.3 Other hazards:

Contains isocyanates. May produce an allergic reaction.

Section 3: Composition/Information on Ingredients

Chemical Name	CAS No.	Wt. %	GHS Classification
Polymeric MDI	9016-87-9	30 - 70	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 Acute Tox. 4; H332 Resp. Sens. 1; H334 STOT SE 3; H335 STOT RE 2; H373
Methylene diphenyl diisocyanate (MDI)	101-68-8	30 - 70	Skin Irrit. 2; H315 Eye Irrit. 2; 319 Skin Sens. 1; H317 Acute Tox. 4; H332 Resp. Sens. 1; H334 STOT SE 3; H335 STOT RE 2; H373

Section 4: First Aid Measures

4.1 Description of first aid measures:

Precautions: Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment). First aid providers should avoid direct contact with this chemical.

Inhalation: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE/doctor.

If breathing has stopped, trained personnel should begin artificial respiration (AR) or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Immediately obtain medical attention and transport victim to an emergency care facility.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

If product is a solid in the eye: Do not allow victim to rub eye(s). Let the eye(s) water naturally for a few minutes. Have victim look right and left, and then up and down. If particle/dust does not dislodge, rinse cautiously with water until particle is removed. If irritation persists, obtain medical attention. DO NOT attempt to manually remove anything stuck to eye(s).

Skin Contact: Take off immediately all contaminated clothing shoes and leather goods (e.g. watchbands, belts). Wash exposed skin with plenty of water and non-abrasive soap. Completely decontaminate clothing, shoes and leather goods before reuse or discard. Quickly and gently blot or brush away excess chemical. Immediately wash with lukewarm, gently flowing water and non-abrasive soap for 15-20 minutes. Completely decontaminate clothing, shoes and leather goods before reuse or discard. If skin irritation or rash occurs: Get medical advice/attention.

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Section 4: First Aid Measures, continued

Ingestion: If swallowed, call a POISON CENTER or doctor/physician. Never give anything by mouth if victim is rapidly losing consciousness or is unconscious or convulsing. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Quickly transport victim to an emergency care facility.

4.2 Most important symptoms and effects, both acute and delayed:

Inhalation: Respiratory tract irritation, difficulty breathing or asthmatic reaction.

Eye Contact: Irritation of the eye tissue.

Skin Contact: Tingling, irritation or redness of the skin.

Ingestion: Swallowing is expected to cause drowsiness and dizziness, weakness, nausea and vomiting. Causes irritation of the tissues of the mouth, throat and digestive tract. Onset of symptoms may be delayed.

4.3 Indication of any immediate medical attention and special treatment needed:

Get immediate medical advice/attention if inhaled or if allergy symptoms develop.

Section 5: Firefighting Measures

5.1 Extinguishing media:

Carbon dioxide, dry chemical powder, dry sand, alcohol-resistant foam. Alcohol resistant foams are preferred for large fires. Use water spray to cool fire-exposed containers. Exercise caution when using water since the reaction between water and hot isocyanates can be vigorous and will generate CO₂ gas. Unsuitable extinguishing media: High volume water jet.

5.2 Special hazards arising from the chemical:

During a fire, products of combustion may include toxic hydrogen cyanide, isocyanate vapor, carbon monoxide, carbon dioxide, nitrogen oxides, dense smoke and irritating or toxic fumes.

Reacts vigorously with water at high temperatures. Closed containers may rupture violently when heated or contaminated with water.

5.3 Special protective equipment and precautions for firefighters:

As for any fire, evacuate the area and fight the fire from a safe distance. Firefighters must wear full protective equipment including self-contained breathing apparatus with chemical protection clothing when firefighters are exposed to decomposition products from this material.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear adequate personal protective equipment, including an appropriate respirator as indicated in Section 8. Isolate spill area, preventing entry by unauthorized persons. Ventilate area of spill. Do not touch or walk through spilled material. Stop the leak if you can do it without risk.

When cleaning with Decontamination solution, harmful gases may evolve; ensure adequate ventilation or wear a respirator.

6.2 Environmental precautions:

Avoid releases to the environment and prevent material from entering confined areas, domestic sewers, natural waterways, or storm water management systems.

6.3 Methods and material for containment and cleaning up:

Immediately shut off the leak if it is safe to do so. Contain the spill with suitable non-combustible absorbent material (e.g. sand, silica gel, acid binder, universal binder). Use clean tools to collect absorbed material.

Shovel into open-top drums or plastic bags for further decontamination, if necessary. Do not seal drums or containers.

Neutralize small spills with Decontamination solution.

Never return spills in original containers for re-use.

Wash area with one of the following Decontamination solutions:

Formulation A: Liquid surfactant 0.2% to 2%; Sodium carbonate 5% to 10%; Water to make up to 100%.

Formulation B: Liquid surfactant 0.2% to 2%; Concentrated ammonia 3% to 8%; Water to make up to 100%.

Formulation C: Ethanol, isopropanol or butanol 50%; Concentrated ammonia 5%; Water to make up to 100%.

Formulation B reacts faster than Formulation A.

Formulation C is especially suitable for cleaning of equipment from unreacted isocyanate and neutralizing under freezing conditions.

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6.4 Reference to other sections:

See Section 8 for information on selection of personal protective equipment.
See Section 13 for information on disposal of spilled product and contaminated absorbents.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

Before handling, it is important that engineering controls are operating, protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use.

Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.

Keep container tightly closed.

Do not breathe vapors, fumes, spray mist or dusts from this material. Use only in a well-ventilated area.

Avoid contact with skin and eyes.

Wear respiratory protection when handling heated product or if spraying.

Wear protective gloves, protective clothing and eye/face protection.

Contaminated work clothing must not be allowed out of the workplace.

Do not reseal containers if contamination of containers is suspected.

Assume that empty containers contain residues which are hazardous.

Keep away from food and drink.

Wash hands and exposed skin before eating, drinking or smoking and at the end of the workshift.

Refer to directives and regulations for instructions on the safe handling, employee training, monitoring and enforcement procedures for isocyanates [e.g. US Department of Labor, OSHA Directive # CPL 03-00-017 National Emphasis Program – Occupational Exposure to Isocyanates. Ontario Designated Substances Regulation-Isocyanates].

7.2 Conditions for safe storage:

Store in a dry, well-ventilated area, out of direct sunlight and away from heat, sources of ignition and incompatible materials.

Recommended storage temperature: 16 – 38°C (60 – 100°F).

Have appropriate fire extinguishers and spill clean-up equipment in or near storage area.

Store in a place accessible by authorized persons only.

Keep containers tightly closed. Store product in its original container.

Protect from moisture/humidity; Polymeric MDI reacts with water producing CO₂ gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Do not re-seal contaminated containers.

Section 8: Exposure Controls / Personal Protection

8.1 Control parameters:

Occupational Exposure Limits: Consult local authorities for acceptable exposure limits.

Ingredient	ACGIH® TLV®	U.S. OSHA PEL	Alberta (Canada) TWA
Polymeric MDI	Not established	Not established	0.07 mg/m ³ (0.005 ppm)
Methylene diphenyl diisocyanate (MDI)	0.051 mg/m ³ (0.005 ppm)	0.2 mg/m ³ (0.02 ppm)	0.005 ppm 0.02 ppm Ceiling Designated Substance

Other exposure guidelines: IDLH*=75 mg/m³ (*Immediately Dangerous to Life or Health, NIOSH)

Some jurisdictions have specific regulations for isocyanates. These regulations may include requirements for medical surveillance programs, including pre-employment and pre-placement examinations, periodic medical examinations, clinical tests, health education and record keeping. Obtain detailed information from the appropriate government agency in relevant jurisdictions.

8.2 Exposure controls:

Engineering Controls: Handle product in closed system or area provided with appropriate exhaust ventilation.

Handle in accordance with good industrial hygiene and safety practice. Ensure regular cleaning of equipment, work area and clothing. Curing ovens must be properly ventilated to prevent emissions of isocyanate monomer into the workplace.

Monitor the workplace air for the presence of isocyanate vapor and fume.

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection. Have equipment available for use in emergencies such as spills or fire.

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8.3 Individual protection measures:

Personal protection: Workers must comply with the Personal Protective Equipment requirements of the workplace in which this product is handled.

Eye/Face protection: Wear chemical safety goggles. Wear a face-shield or full-face respirator when needed to prevent exposure to liquid, mist or fume.

Skin protection: Wear chemical protective gloves, suit, and boots to prevent skin exposure. Polyvinyl alcohol or Butyl rubber gloves may be used to minimize dermal exposures to this material and for cleaning and maintenance operations. Evaluate resistance under conditions of use and maintain protective clothing carefully.

Respiratory protection: Approved respiratory protective equipment (RPE) is required. NIOSH approved self-contained breathing apparatus (SCBA) or supplied air respirator.

A respiratory protection program that meets the regulatory requirement, such as OSHA's 29 CFR 1910.134 or Canadian Standards Association (CSA) Standard Z94.4, must be followed whenever workplace conditions warrant a respirator's use.

NIOSH Recommendations for MDI concentrations in air:

Up to 0.5 mg/m³: (APF = 10) Any supplied-air respirator

Up to 1.25 mg/m³: (APF = 25) Any supplied-air respirator operated in a continuous-flow mode

Up to 2.5 mg/m³: (APF = 50) Any self-contained breathing apparatus with a full facepiece

(APF = 50) Any supplied-air respirator with a full facepiece

Up to 75 mg/m³: (APF = 2000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

Emergency or planned entry into unknown concentrations or IDLH conditions, 75 mg/m³:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:

(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having an N100, R100, or P100 filter.

Other protection: Safety shower, hand-wash station and eye-wash fountain readily available in the immediate work area.

Environmental exposure controls: Store finished products in closed containers (e.g. bulk tanks, drums, cans). All waste products are assumed to be collected and returned for re-processing or incineration.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Appearance:	Liquid; viscous, dark brown
Odor:	Musty odor of isocyanates
Odor threshold:	4 mg/m ³ (4 ppb) for MDI
pH:	Not available
Melting point/freezing point:	Not available
Initial boiling point and boiling range:	>204°C (399°F) (decomposes)
Flash point:	230°C (446°F)
Flammability:	Product can burn if strongly heated or involved in a fire.
Auto-ignition temperature:	Not available
Upper/lower flammability or explosive limits:	Not available
Explosive properties:	Not available
Oxidising properties:	Not available
Sensitivity to mechanical impact:	Not applicable
Sensitivity to static discharge:	Not applicable
Evaporation rate:	Not available
Vapor pressure:	<10 ⁻⁴ mmHg @ 40°C
Vapor density:	11-13 approximate (air = 1)
Relative density:	1.25 @ 25°C (77°F) (water = 1)
Solubility (ies):	Insoluble in water; reacts with water
Partition coefficient (n-octanol/water):	Not available; reacts with water
Decomposition temperature:	>300°C (>572°F)
Viscosity:	Dynamic: 200 +/- 50 mPa s

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Section 10: Stability and Reactivity

10.1 Reactivity:

Reacts with water, Amines, Strong bases, Alcohols, Metal compounds (e.g. organotin catalysts).

10.2 Chemical stability:

No information available for the mixture.

Isocyanates are very reactive compounds and are especially highly reactive toward a large number of compounds with active hydrogens, particularly at high temperatures and in the presence of catalysts. May attack and make brittle many plastic and rubber materials.

10.3 Possibility of hazardous reactions:

Contact with water or humidity may cause a slow reaction, forming carbon dioxide which could rupture closed containers.

MDI may undergo uncontrolled exothermic polymerization upon contact with incompatible materials or if heated above 175-204°C. The resulting pressure build-up could rupture closed containers.

10.4 Conditions to avoid:

Avoid moisture, heat and freezing temperatures.

10.5 Incompatible materials:

Strong bases, Amines, Alcohols, Acids - May react violently with generation of heat.

Metal compounds (e.g. organotin catalysts) - May polymerize with the generation of heat and pressure.

Amides, phenols, mercaptans, urethanes, ureas and surface active compounds (surfactants, non-ionic detergents) - May react vigorously or violently with the generation of heat.

Water - Reacts slowly, forming carbon dioxide which could rupture closed containers.

10.6 Hazardous decomposition products:

By thermal decomposition and combustion, product may generate nitrogen oxide, hydrogen cyanide and isocyanate vapours.

Section 11: Toxicological Information

11.1 Information on toxicological effects:

Acute health hazards:

Inhalation: Data not available for the mixture.

MDI has a very low vapor pressure and it is difficult to achieve vapor concentrations necessary for inhalation toxicity testing. Mice exposed to MDI aerosols varying from 7 to 59 mg/m³ for 4 hours demonstrated a decline in respiratory rate which was determined to be due mainly to MDI's action as a pulmonary irritant. The RD₅₀ (concentration to reduce the respiratory rate by 50%) was 32 mg/m³.

Some people may become sensitized to MDI, causing allergy or asthma symptoms or breathing difficulties if inhaled.

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.

Both the aerosol developed for the acute inhalation toxicity tests and the conditions required to achieve it are artificial and not experienced in normal handling and use of MDI. The EU Risk Assessment of MDI (Directive 793/93/EEC, 3rd Priority List) published in 12/2005 notes that considering the physical properties of these aerosols and the high settling velocity of particles generated under real life conditions, there is no potential for exposure to acutely toxic doses (dose = concentration x time). This finding is supported by the industrial exposure data.

Skin: Data not available for the mixture.

Polymeric MDI can cause mild irritation. MDI can cause mild irritation. Isocyanates, in general, can cause skin discoloration (staining) and hardening of the skin after repeated exposures. Skin sensitization, resulting in dermatitis, may occur in some individuals. Cured material may be difficult to remove from the skin.

Eye: Data not available for the mixture.

MDI, Liquid, vapors and aerosols, can cause eye irritation in humans.

Ingestion: Data not available for the mixture. Animal studies indicate that ingested Polymeric MDI has low toxicity.

Swallowing may result in irritation and corrosion of the mouth, throat and digestive tract.

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Section 11: Toxicological Information, continued

Skin corrosion / irritation

In a study with similar MDI isomers, MDI caused irritation and edema in rabbits. (test according to OECD guideline 404)

Serious eye damage / irritation

In animal studies, MDI caused moderate conjunctivitis in rabbits but did not meet the criteria for classification as an irritant. (test according to OECD guideline 405).

Human evidence: eye irritation was reported in workers exposed to airborne concentrations of 0.06 to 1.6 µg/m³ of MDI monomer vapor and aerosol.

Acute Toxicity Data

<u>Ingredient</u>	<u>LD₅₀ Oral</u>	<u>LD₅₀ Dermal</u>	<u>LC₅₀ Inhalation</u>
Polymeric MDI	>2000 mg/kg (rat)	>9000 mg/kg (rabbit)	490 mg/m ³ / 4 hrs. (rat) Aerosol, particle size: 95% less than 4.3 microns mass median aerodynamic diameter (MMAD)
Methylene diphenyl diisocyanate (MDI)	2200 mg/kg (mouse)	>1 000 mg/kg (rabbit)	490 mg/m ³ / 4 hrs. (rat) Aerosol, particle size: 95% less than 4.3 microns mass median aerodynamic diameter (MMAD)

STOT (Specific Target Organ Toxicity) – Single exposure

Inhalation: MDI is a severe respiratory irritant. Long-term, low-level exposure could cause severe, permanent respiratory impairment. Respiratory sensitization can develop in people working with MDI. Sensitized individuals react to very low levels of MDI (as low as 0.0014 ppm) that have no effect on unsensitized people. Symptoms may initially appear to be a cold or mild hay fever; severe asthmatic symptoms can develop and include wheezing, chest tightness, shortness of breath, difficulty breathing and/or coughing. Fever, chills, general feelings of discomfort, headache and fatigue can also occur. Symptoms may occur immediately upon exposure or may be delayed. Sensitized people who continue to work with MDI may develop symptoms sooner after each exposure. The number and severity of symptoms may increase. MDI and other isocyanates may also cause hypersensitivity pneumonitis, another allergic lung disease, which is characterized by symptoms such as shortness of breath, fever, tiredness, non-productive cough, and chills.

STOT (Specific Target Organ Toxicity) – Repeated exposure

From inhalation of MDI: Long-term, low-level exposure may cause severe, permanent respiratory impairment.

Aspiration hazard

Data not available.

Sensitization - respiratory and/or skin

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Isocyanates are known to cause skin and respiratory sensitization in humans. Animal tests have indicated that respiratory sensitization can result from skin contact with diisocyanates.

Repeated skin contact with this material may cause skin sensitization in humans. Further skin contact may result in inflammation, rash, itching and staining.

Carcinogenicity

Data not available for the mixture.

The International Agency for Research on Cancer (IARC) evaluated MDI as not classifiable as to carcinogenicity to humans (Group 3).

This mixture does not contain any component that is considered a human carcinogen by IARC (International Agency for Research on Cancer), ACGIH (American Conference of Governmental Industrial Hygienists), OSHA (Occupational Safety and Health Administration) or NTP (National Toxicology Program).

Reproductive toxicity

Development of offspring: Data not available

Sexual function and fertility: Data not available

Effects on or via lactation: Data not available

Germ cell mutagenicity

Not known to be mutagenic. Overall, tests assessing the mutagenic potential of MDI in vitro and in vivo provide no convincing evidence of mutagenic and genotoxic activity (EU Risk Assessment 2005).

Interactive effects

Data not available

SAFETY DATA SHEET**Section 12: Ecological Information****12.1 Toxicity:**

Data for Polymeric MDI –
LC₅₀, Zebra fish >1 000 mg/L.
EC₅₀ Daphnia magna (24 hour) >1 000 mg/L.
EC₅₀ E. coli >100 mg/L.

12.2 Persistence and degradability:

Not readily biodegradable.

12.3 Bioaccumulative potential:

Data not available

12.4 Mobility in soil:

Data not available

Section 13: Disposal Considerations**13.1 Disposal methods:**

Do NOT discard into any sewers, on the ground or into any body of water. Store material for disposal as indicated in Section 7 Handling and Storage.
Dispose of waste in accordance with relevant national, regional and local environmental control provisions.

Section 14: Transport Information**14.1 U.S. Hazardous Materials Regulation (DOT 49CFR):**

Not regulated except when shipped in bulk. Bulk containers (>5 000 lbs) must be transported as:
UN3082

14.2 Shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Methylene Diphenyl Diisocyanate) RQ

14.3 Transport hazard class(es):

Class 9

14.4 Packing group:

PG III

14.5 Environmental hazards:

Hazardous substance RQ Methylene Diphenyl Diisocyanate 5000 lb (2270 kg)

14.6 Special precautions for user:

Contains isocyanates. Keep away from moisture and water.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Not available

Section 15: Regulatory Information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:****USA****TSCA Status:**

Substances are listed on the TSCA inventory.

SARA Title III :

Sec. 313 Methylene diphenyl diisocyanate (MDI), 1% de minimis
CERCLA RQ Methylene diphenyl diisocyanate (MDI) 5000 lbs (2270kg)

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Section 15: Regulatory Information, continued

Canada

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

WHMIS 1988 Classification:

D1A – Immediate and serious toxic effects (untested mixture containing MDI).

D2A (D2B) - Other toxic effects – Respiratory sensitization; skin and eye irritation; skin sensitization.

NSNR Status:

Substances are listed on the on the DSL.

European Inventories:

Substances are listed on EINECS

International Inventories:

Australia: Substances are listed on the Inventory of Chemical Substances (AICS).

China: Substances are present on the Chemical Inventory (IECSC).

European Union: Polymeric MDI is not listed on EINECS.

Japan: Substances are present on the inventory Existing and New Chemical Substances (ENCS).

Korea: Substances are present on the inventory - Existing and Evaluated Chemical Substances.

Mexico: Substances are present on the inventory (INSQ).

New Zealand: Substances are present on the Chemical Inventory (NZIoC).

Philippines: Substances are present on the Inventory of Chemicals and Chemical Substances (PICCS).

Section 16: Other Information

Revision date:

September 23, 2015

Revision summary:

Not applicable

References and sources for data:

CCOHS, Cheminfo Profile for polymeric and monomeric Methylene diphenyl diisocyanate

RTECS, Registry of Toxic Effects of Chemical Substances

EU Risk Assessment for MDI 2005

Legend to abbreviations:

ACGIH – American Conference of Governmental Industrial Hygienists

GHS- Globally Harmonized System for Classification and Labeling.

IDLH – Immediately Dangerous to Life or Health

LD50- Median lethal dose; the dose causing 50 % lethality

NIOSH-National Institute for Occupational Safety and Health

OEL– Occupational exposure limit

OSHA - Occupational Safety and Health Administration

TWA – Time weighted average

TLV - Threshold Limit Value

WHMIS – Workplace Hazardous Materials Information System.

Supplier Note:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.