

MR 1099 Isocyanate

1. PRODUCT IDENTIFICATION and COMPANY INFORMATION

PRODUCT NAME: MR 1099 Isocyanate

Company Identification

American Recycling Center, Inc.
655 Wabasse Drive
Owosso, MI. 48867

Customer Information Number: 989-725-5100

24-Hour Emergency Phone Number: 989-636-4400

ISSUE DATE : 11/21/2007

REVISION: 05/06/2008

2. Hazards Identification

Emergency Overview

Color: Yellow

Physical State: Liquid

Odor: Musty

Hazards of product:

WARNING! Causes eye irritation. May cause allergic skin reaction. May cause allergic respiratory reaction. May cause skin irritation. May be harmful if inhaled. May cause lung injury. May react with water. Isolate area. Keep upwind of spill. Stay out of low areas. Elevated temperatures can cause hazardous polymerization. Material reacts slowly with water, releasing carbon dioxide which can cause pressure buildup and rupture of closed containers. Elevated temperatures accelerate this reaction. Toxic fumes may be released in fire situations. Avoid temperatures above 40°C (104°F) Highly toxic to fish and/or other aquatic organisms.

OSHA HAZARD COMMUNICATION STANDARD

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Health Effects

Eye Contact: May cause moderate eye irritation. May cause moderate corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness.

Skin Contact: Prolonged contact may cause moderate skin irritation with Local redness. May stain skin.

Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Skin Sensitization: Skin contact may cause an allergic skin reaction. Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

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Inhalation: Vapor concentrations are attainable which could be hazardous on single exposure. Excessive exposure to TDI may cause severe irritation of the upper respiratory tract and lungs, fluid in the lungs, permanent decrease of lung function, neurologic disorders, cholinesterase depression and gastrointestinal distress. Effects may be delayed. Decreased lung function has been associated with Overexposure to isocyanates.

Respiratory Sensitization: May cause allergic respiratory response. Reexposure to extremely low isocyanate concentrations may cause allergic respiratory reactions in individuals already sensitized. Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

Ingestion: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Swallowing may result in gastrointestinal irritation or ulceration.

Effects of Repeated Exposure: Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

Cancer Information: Lung tumors have been observed in laboratory animals exposed to respirable aerosol Droplets of MDI/Polymeric MDI (6 mg/m³) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI. An oral study in which high doses of TDI were reported to cause cancer in animals has been found to contain numerous deficiencies which compromise the validity of the study. TDI did not cause cancer in laboratory animals exposed by inhalation, the most likely route of exposure.

Birth Defects/Developmental Effects: For the component(s) tested: Has been toxic to the fetus in lab animals at doses toxic to the mother.

3. COMPOSITION/INFORMATION

Component	CAS Number	Amount
Toluene Diisocyanate, Methylenediphenyl Diisocyanate, Propyleneglycol, Copolymer	39288-44-3	>=70.0 - <=90.0%
Toluene-diisocyanate, mixture of toluene-2, 4-di-isocyanate and toluene-2,6-di-isocyanate	26471-62-5	<= 1.0%
Methylenediphenyl diisocyanate (MDI)	26447-40-5	>=10.0 - <=20.0 %

Note; Contains 4,4'-Methylenediphenyl diisocyanate, CAS 101-68-8

(See Section 8, Exposure controls/Personal protection).

4. FIRST-AID MEASURES

EYE CONTACT:

Immediately flush eyes with plenty of water; Remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.

SKIN CONTACT:

Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. An MDI skin decontamination study demonstrated that cleaning very soon after exposure is important, and that a polyglycol-based skin cleanser or corn oil may be more effective than soap and water. This may also apply to other isocyanates. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

INHALATION:

Move person to fresh air. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

Ingestion: Do not induce vomiting. Give one cup (8 ounces or 240 ml) of water or milk if available and transport to a medical facility. Do not give anything by mouth to an unconscious person.

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Notes to Physician:

Due to irritant properties, swallowing may result in burn/ulceration of mouth, stomach and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal/esophageal control if lavage is done. May cause respiratory sensitization or asthma-like symptoms. Bronchodilators, expectorants and antitussives may be of help. Treat bronchospasm with inhaled beta2 agonist and oral or parenteral corticosteroids. Respiratory symptoms, including pulmonary edems, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Maintain adequate ventilation and oxygenation of the patient. If you are sensitized to diisocyanates, consult your physician regarding working with other respiratory irritants or sensitizers. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Medical Conditions Aggravated by Exposure: Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome).

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Water is not recommended, but may be applied in large quantities as a fine spray when other extinguishing agents are not available. Do not use direct water stream. May spread fire. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Move container from fire area if this is possible without hazard. Use water spray to cool fire-exposed containers and fire-affected zone until fire is out. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

Unusual Fire and Explosion Hazards: Product reacts with water. Reaction may produce heat and/or gases. This reaction may be violent. Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is produced when product burns.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Isocyanates. Hydrogen cyanide. Carbon monoxide. Carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Steps to be Taken if Material is Released or Spilled: Contain spilled material if possible. Absorb with materials such as: Sawdust. Dirt. Vermiculite. Sand. Clay. Cob grit. Milsorb®. Do NOT use absorbent materials such as: Cement powder (Note: May generate heat). Collect in suitable and properly labeled open containers. Do not place in sealed containers. Suitable containers include: Metal drums. Plastic drums. Polylined fiber pacs. Wash the spill site with large quantities of water. Attempt to

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neutralize by adding suitable decontaminant solution: Formulation 1: sodium carbonate 5-10%; liquid detergent 0.2 – 2%; water to make up to 100%, OR Formulation 2: concentrated ammonia solution 3 – 8%; liquid detergent 0.2 – 2%; water to make up to 100%. If ammonia is used, use good ventilation to prevent vapor exposure. Contact Dow for clean-up assistance. See Section 13, Disposal Consideration, for additional information.

Personal Precautions:

Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Isolate area. Refer to Section 7, Handling, for additional precautionary measures. Keep unnecessary and unprotected personnel from entering the area. Keep personnel out of low areas. Keep upwind of spill. Ventilate area of leak or spill. If available, use foam to suppress vapors. See Section 10 for more specific information.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12. Ecological Information. Spills or discharge to natural waterways is likely to kill aquatic organisms.

7. HANDLING AND STORAGE

Handling

General Handling: Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Avoid breathing vapor. Use with adequate ventilation. Keep container closed. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Other Precautions: Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

STORAGE

Store in a dry place. Protect from atmospheric moisture. Maintain a nitrogen atmosphere. Do not store product contaminated with water to prevent potential hazardous reaction. See Section 10 for more specific information.

Storage Period: 6 Months
Storage temperature: 18 - 40°C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Component	List	Type	Value
Toluene-diisocyanate, mixture Of toluene-2,4-di-isocyanate And toluene-2,6-di-isocyanate	ACGIH	TWA	0.005 ppm SEN
	ACGIH	STEL	0.02 ppm SEN
	Dow IHG	TWA	0.005 ppm SEN
	Dow IHG	Ceiling	0.02 ppm SEN
4,4' –Methylenediphenyl Diisocyanate	ACGIH	TWA	0.005 ppm
	OSHA Table Z-1	Ceiling	0.2 mg/m3 0.02 ppm

Personal Protection

Eye/Face Protection: Use chemical goggles. Eye wash fountain should be located in immediate work area.

Skin Protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Remove contaminated clothing immediately, was skin area with soap and water. Contaminated clothing should be disposed of properly or decontaminated and laundered before reuse. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly.

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Hand Protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Viton. Butyl rubber. Polyethylene. Neoprene. Natural rubber ("latex"). Polyvinyl chloride ("PVC" or vinyl"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl alcohol ("PVA"). Ethyl vinyl alcohol laminate ("EVAL"). **NOTICE:** The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. When atmospheric levels may exceed the exposure guideline, use an approved air-purifying respirator equipped with an organic vapor sorbent and a particle filter. For situations where the atmospheric air-supplying respirator (air line or self-contained breathing apparatus). For emergency response or contained breathing apparatus or positive-pressure air line with auxiliary self-contained air supply. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls

Ventilation: Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Exhaust systems should be designed to move the air away from the source of vapor/aerosol generation and people working at this point. The odor and irritancy of this material are inadequate to warn of excessive exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Yellow
Odor	Musty
Flash Point – Closed Cup	>=200 °C (>= 392 °F) ASTM D3278
Flammable Limits In Air	Lower: Not applicable Upper: Not applicable
Autoignition Temperature	No test data available
Vapor Pressure	No test data available
Boiling Point (760 mmHg)	>300 °C (>572 °F) Decomposes.
Vapor Density (air =1)	No test data available
Specific Gravity (H₂O =1)	1.10 – 1.14 <i>DIN 51757/D</i>
Freezing Point	No test data available
Melting Point	No test data available
Solubility in Water (by Weight)	(reacts with evolution of CO ₂)
pH	Not applicable
Kinematic Viscosity	No test data available

10. STABILITY AND REACTIVITY

Stability/Instability

Stable under recommended storage conditions. See Storage, Section 7.

Conditions to Avoid:

Avoid temperatures above 40 °C (104 °F). Avoid temperatures below 18 °C (64°F). Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid. Avoid moisture. Material reacts slowly with water, releasing carbon dioxide which can cause pressure buildup and rupture of closed containers. Elevated temperatures accelerate this reaction.

Incompatible Materials: Avoid contact with Acids. Alcohols. Amines. Water. Ammonia. Bases. Metal compounds. Moist air. Strong oxidizers. Diisocyanates react with many materials and the rate of reaction

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increases with temperature as well as increased contact; these reactions can become violent. Contact is increased by stirring or if the other material mixes with the diisocyanate. Diisocyanates are not soluble in water and sink to the bottom, but react slowly at the interface. The carbon dioxide and heat. Avoid contact with metals such as: Aluminum. Zinc. Brass. Tin. Copper. Galvanized metals. Avoid contact with absorbent materials such as: Moist organic absorbents. Avoid unintended contact with polyols. The reaction of polyols and isocyanates generate heat.

Hazardous Polymerization

Can occur. Elevated temperatures can cause hazardous polymerization. Polymerization can be catalyzed by: Strong bases. Water.

Thermal Decomposition

Decomposition products depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Ingestion

Single dose oral LD50 has not been determined.

Skin Absorption

The dermal LD50 has not been determined.

Sensitization

Skin

Skin contact may cause an allergic skin reaction. Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

Respiratory

May cause allergic respiratory response. Reexposure to extremely low isocyanate concentrations may cause allergic respiratory reactions in individuals already sensitized. Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

Repeated Dose Toxicity

Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

Chronic Toxicity and Carcinogenicity

Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI. An oral study in which high doses of TDI were reported to cause cancer in animals has been found to contain numerous deficiencies which compromise the validity of the study. TDI did not cause cancer in laboratory animals exposed by inhalation, the most likely route of exposure.

Carcinogenicity Classifications:

Component	List	Classification
Toluene-diisocyanate, mixture Of toluene-2,4-diisocyanate And toluene-2,6-diisocyanate	NTP	Anticipated carcinogen.
	IARC	Possible carcinogen.;2B

Developmental Toxicity

For the component(s) tested: Has been toxic to the fetus in lab animals at doses toxic to the mother.
For the component(s) tested: Did not cause birth defects in laboratory animals.

Reproductive Toxicity

In animal studies, TDI has been shown not to interfere with reproduction.

Genetic Toxicology

The data presented are for the following material: Toluene diisocyanate (TDI) In vitro genetic toxicity studies were negative in some cases and positive in other cases. Genetic toxicity data on MDI are

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inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative. The data presented are for the following material: Toluene diisocyanate (TDI) Animal genetic toxicity studies were negative. Results of a Drosophila study were reported to be weakly positive; however, these positive findings are believed to be due to degradation of TDI in the solvent delivery vehicle.

12. ECOLOGICAL INFORMATION

CHEMICAL FATE

Data for Component: **Toluene-diisocyanate, mixture of toluene-2,4-di-isocyanate and toluene-2,6-di-isocyanate**

Movement & Partitioning

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Persistence and Degradability

In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
6.26e-12 cm ³ /s	1.708 d	Estimated

Data for Component: **Methylenediphenyl diisocyanate (MDI)**

Movement & Partitioning

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Persistence and Degradability

In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

ECOTOXICITY

Based on information for MDI and polymeric MDI. The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species. Material is practically non-toxic to aquatic organisms on an acute basis (LC₅₀/EC₅₀ > 100 mg/L in most sensitive species). The LC₅₀ in earthworm *Eisenia foetida* is > 1000 mg/kg.

ECOTOXICITY

Data for Component: **Toluene-diisocyanate, mixture of toluene-2,4-di-isocyanate and toluene-2,6-di-isocyanate**

The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species. Acute aquatic LC₅₀s range from moderately toxic (1-10 mg/L) to practically non-toxic (>100 mg/L) in most species tested; however, it is highly toxic (0.1-1 mg/L) in a specific life stage of Japanese red sea bream.

Toxicity to Soil Dwelling Organisms

LC₅₀, Earthworm *Eisenia foetida*, adult, 14d: >1,000 mg/kg

Data for Component: **Methylenediphenyl diisocyanate (MDI)**

The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing

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production of soluble species. Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50.100mg/L in the most sensitive species tested).

Toxicity to Soil Dwelling Organisms

LC50, Earthworm Eisenia foetinda, adult, 14d:1,000 mg/kg

13. DISPOSAL CONSIDERATIONS

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AMERICAN RECYCLING CENTER, INC. HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition information. FOR UNUSED AND UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Recycler. Reclaimer. Incinerator or other thermal destruction device. For additional information, refer to: Handling & Storage Information, MSDS Section 7 Stability & Reactivity Information, MSDS Section 10 Regulatory Information, MSDS Section 15.

14. TRANSPORT INFORMATION

DOT Non-Bulk

Not Regulated

DOT Bulk

Proper Shipping Name: OTHER REGULATED SUBSTANCES, LIQUID, NOS

Technical Name: Toluene Diisocyanate, MDI

Hazard Class: 9 **ID Number:** NA3082 **Packing Group:** PG

IMDG

NOT REGULATED

ICAO/IATA

Not regulated

Additional Information

Reportable quantity: 16,667 lb-TOLUENE DIISOCYANATE, 25,000 lb – MDI

This information is not intended to convey all specific regulatory or operational requirement/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard	Yes	
Delayed (Chronic) Health Hazard	Yes	
Fire Hazard		No
Reactive Hazard		Yes
Sudden Release of Pressure Hazard	No	

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Superfund Amendment and Reauthorization Act of 1986 Title (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This Product contains the following substances which are subject to the reporting requirements of Section 313 of Title of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372.

Component	CAS#	Amount
4,4' -Methylenediphenyl diisocyanate	101-68-8	

Pennsylvania (Worker and Community Right-TO-Know Act): Pennsylvania Hazardous Substances list and/or Pennsylvania Environmental Hazardous Substance List:

The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

Component	CAS#	Amount
4,4' -Methylenediphenyl diisocyanate	101-68-8	>=10.0-<=20.0%

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

Component	CAS#	Amount
Toluene-diisocyanate, mixture of toluene-2,4-di-	26471-62-5	<=1.0%
Isocyanate and toluene-2,6-di-isocyanate		

US. Toxic Substances Control Act

All components of this product are on the TSCA Inventory or are exempt from TSCA INVENTORY REQUIREMENTS UNDER 40 CFR 720.30

CEPA – DOMESTIC SUBSTANCES LIST (DSL)

This product contains one or more substances which are not listed on the Canadian Domestic Substances List (DSL). Contact your Dow representative for more information.

16. Other Information

Recommended Uses and Restrictions

Component(s) for the manufacture of urethane polymers. It is recommended that you use this product in a manner consistent with the listed use.

Revision

Identification Number: 76329/1001/Issue Date 11/21/2007/Version: 2.0.

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Legend

N/A	Not Available
W/W	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
HAZ _ DES	Hazard Designation
Action Level	A value set by OSHA that is lower than the PEL which will trigger the need for activities such as exposure monitoring and medical surveillance if exceeded.

NOTICE

American Recycling Center, Inc. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, expressed or implied is given. Regulatory requirements are subject to change and may differ

between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state or provincial, and local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product.