Natural-Therm<sup>TM</sup> MDI "A" COMPONENT

Revised Date: 1/27/2015

Draft: 1 SDS-055

# **SECTION 1: IDENTIFICATION**

PRODUCT NAME Natural-Therm<sup>TM</sup> MDI "A" COMPONENT

CAS NUMBER Not available
PRODUCT USE Polyurethane foam
MANUFACTURER Natural Polymers, LLC

ADDRESS 4N 325 Powis Road West Chicago, IL 60185

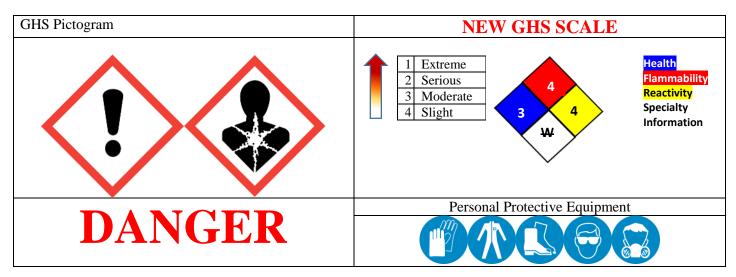
PHONE 888-563-3111 FAX 253-588-7196

EMERGENCY CONTACT: FOR SPILLS, LEAKS, FIRE or EXPOSURE CALL CHEMTREC

TOLL FREE 800-424-9300 INTERNATIONAL +1-703-527-3887 FAX 913-321-1490

### **SECTION 2: HAZARDS IDENTIFICATION**

#### **GHS CLASSIFICATION:**



#### **EMERGENCY OVERVIEW:**

	HAZARD STATEMENTS		PRECAUTIONARY STATEMENTS
H332	Harmful if inhaled	P264	Wash exposed skin thoroughly after handling
H373	May cause damage to organs through prolonged	P260	Do not breathe fume/mist/vapors/spray
	or repeated exposure by inhalation	P271	Use only outdoors or in a well-ventilated area
H319	Causes serious eye irritation	P272	Contaminated work clothing should not be
H335	May cause respiratory irritation		allowed out of the workplace
H315	Causes skin irritation	P280	Wear protective gloves/protective clothing/eye
H334	May cause allergy or asthma symptoms or		protection/face protection
	breathing difficulties if inhaled	P285	In case of inadequate ventilation, wear
H317	May cause an allergic skin reaction		respiratory protection
H303	May be harmful if swallowed	P403/	Store locked up in well-ventilated place
		405	

APPEARANCE, COLOR, ODOR: Liquid, dark brown, musty

USA: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

READ THE ENTIRE SDS FOR MORE THOROUGH EVALUATION OF THE HAZARDS



Natural-Therm TM MDI "A" COMPONENT

Revised Date: 1/27/2015

Draft: 1 SDS-055

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	% WEIGHT
Polymethylene polyphenylene isocyanate (polymeric MDI)	9016-87-9	30-70
4,4'-Methylenediphenyl diisocyanate (MDI)	101-68-8	30-70

### **SECTION 4: FIRST AID MEASURES**

**EYE:** H319 Causes serious eye irritation. 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.

**SKIN:** H315/317 Causes skin irritation and may cause allergic skin reaction. 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.

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

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF experiencing respiratory

symptoms: call a POISON CENTER or doctor/physician.

**INGESTION** H303 May be harmful if swallowed. IF SWALLOWED: call a POISON

CENTER or doctor/physician IF you feel unwell. Rinse mouth. Call a

POISON CENTER or doctor/physician if you feel unwell.

OTHER: H373 Causes damage to organs through prolonged or repeated exposure. Get

medical advice/attention if you feel unwell.

### **SECTION 5: FIRE FIGHTING MEASURES**

**FLASH POINT:** 230°C (446°F) closed cup

HAZARDS WHEN ON FIRE OR

**NEAR FLAME:** 

Toxic fumes may be released in fire situations. Product can decompose at high temperatures forming toxic gases. Closed containers may develop

pressure and rupture with prolonged exposure to heat.

SUITABLE EXTINGUISHING

**MEDIA:** 

Carbon dioxide, dry chemical powder, foam, water fog or fine spray.

Alcohol resistant foams are preferred for large fires. Use water spray to cool

fire-exposed containers.

UNSUITABLE EXTINGUISHING

**MEDIA:** 

Exercise caution when using water; water contamination of product will

generate CO2 gas.

**SPECIAL EXPOSURE HAZARDS:** During a fire, products of combustion may include carbon monoxide,

carbon dioxide, hydrogen cyanide, nitrogen oxides, dense smoke, and irritating or toxic fumes. Reacts vigorously with water above 122°F (50°C). Closed containers may rupture violently when heated. Polymeric

MDI decomposes rapidly above 572°F (300°C).

Natural-Therm TM MDI "A" COMPONENT

Revised Date: 1/27/2015

Draft: 1 SDS-055

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:

Firefighters should wear full protective gear including self-contained breathing apparatus when fighting chemical fires. Fight fire from a protected location or a safe distance. When using water care must be taken since the reaction between water and hot Polymeric MDI can be vigorous.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE

**MEASURES:** 

For major spills call **CHEMTREC**: Toll free 1-800-424-9300 for

international call 1-703-527-3887.

PERSONAL PRECAUTIONS:

Wear appropriate personal protective equipment recommended in SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION of this SDS. Immediately contact emergency personnel. Evacuate the area. Keep upwind avoiding inhalation of vapors. Clean-up should only be performed by trained personnel. People dealing with major spillages should wear full protective clothing including respiratory protection.

ENVIRONMENTAL PRECAUTIONS:

This material may contaminate the environment without proper control and response to spills. Ensure spilled material does not come in contact with soil, waterway, drains, sewers, or other runoff that would further disperse the material. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air). Sources

of ignition should be kept clear.

**METHODS FOR CONTAINMENT:** 

Use diking or capping to control migration. Contain and absorb large spillages with a non-flammable absorbent carrier (such as vermiculite, earth, or sand. DO NOT USE combustible materials such as sawdust). Shovel into open-top drums or plastic bags for further decontamination, if necessary. Remove and properly dispose of residues. Dispose of via a licensed waste disposal contractor (See SECTION 13: DISPOSAL CONSIDERATIONS) Notify applicable government authorities if release

is reportable.

METHODS FOR CLEANING UP:

Only proceed with clean up by taking the appropriate personal protection measures required and ensure surrounding area does not contain further hazards that could worsen the spill, cause migration, or cause further harm (i.e. eliminate any ignition sources). Wash area with decontamination solution of 0.2-0.5% liquid detergent and 3-8% concentrated ammonium hydroxide. Move any non-contaminated, non-leaking containers from the spill zone if it can be done safely. Dike, dam, or further restrict and stop active leaks without posing further damage or harm to individuals, the environment, and/or structures. Contain and collect spillage. See SECTION 13: DISPOSAL CONSIDERATIONS for disposal information and SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION for recommended Personal Protective Equipment (PPE). Obey all local, state, and federal regulations during clean up.

### **SECTION 7: HANDLING & STORAGE**

Natural-Therm TM MDI "A" COMPONENT

Revised Date: 1/27/2015

Draft: 1 SDS-055

**GENERAL:** 

Ideal storage temperature is  $60 - 90^{\circ}F$  (15-32°C). Handling and storage shall be in accordance with local, state/provincial, or federal regulations.

**HANDLING:** 

Before opening this package, read and follow warning labels on all components. Avoid contact with the product or reaction mixture. Put on appropriate personal protective equipment. Use only with adequate ventilation to ensure that the occupational exposure limit is not exceeded. use respirator when ventilation is inadequate. Avoid breathing aerosols, mists, and vapors. (See SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION for details). Do not ingest. Eating, drinking and smoking shall be prohibited in areas where this material is handled, stored, and processed. Workers shall wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems, asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes, on skin, or clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

STORAGE:

Store in a dry, well-ventilated area, out of direct sunlight and away from heat, sources of ignition and incompatible materials. Ideal storage temperature is  $15^{\circ}\text{C}\text{-}38^{\circ}\text{C}$  ( $60^{\circ}\text{F}-100^{\circ}\text{F}$ ). Keep contents away from moisture; Polymeric MDI reacts with water producing  $CO_2$  gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Purge the container with argon or nitrogen befor re-sealing . Do not re-seal contaminated containers. Store product in original container.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **EXPOSRE LIMITS:**

COMPONENT NAME	CAS Number	EXPOSURE LIMITS
4,4'-Methylenediphenyl diisocyanate (MDI)	101-68-8	ACGIH TLV (United States, 2/2010).  TWA: 0.05 mg/m³ 8 hour(s)  TWA: 0.005 ppm 8 hour(s)  OSHA PEL (United States, 6/2010).  CEIL: 0.2 mg/m³  CEIL: 0.02 ppm  Alberta (Canada)  TWA: 0.005 ppm 8 hour(s)  UK OEL  TWA: 0.02 mg/m³ 8 hour(s)  STEL: 0.07 mg/m³ 8 hour(s)
Polymethylene polyphenylene isocyanate (polymeric MDI)	9016-87-9	Alberta (Canada) TWA: 0.005 ppm 8 hour(s) TWA: 0.07 mg/m <sup>3</sup> 8 hour(s)

Natural-Therm TM MDI "A" COMPONENT

Revised Date: 1/27/2015

Draft: 1 SDS-055

**ENGINEERING CONTROLS:** Use only with adequate ventilation. If user operations generate dust,

> fumes, gas, vapor, or mist, use process enclosures, local exhaust ventilation, and other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**HYGIENE MEASURES:** Wash hands, forearms, and face thoroughly with plenty of soap and water

> after handling chemical products, before eating, smoking and using the restroom and at the end of the working period. Appropriate engineering, administrative, and other best practice decontamination control measures must be used to isolate contaminates on clothing and to prevent unintended migration of contaminants. Handle clothing and other potentially contaminated material appropriately and in compliance with local, state, and federal regulations in the process of removing,

washing/cleaning and reuse of these potentially contaminated materials. Ensure compliant use and location of eyewash station and safety showers.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

**EYE PROTECTION:** Safety eyewear complying with an approved standard should be used

> when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mist, or dusts. If contact is possible, the following protection shall be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and /or face shield. If inhalation

hazards exist, a full-face respirator may be required.

**SKIN PROTECTION:** Personal protective equipment for the body should be selected based on

the task being performed; the risks involved, and should be approved by

an industrial hygiene specialist before handling this product.

HANDS PROTECTION: Chemical resistant gloves complying with applicable health and safety

standards shall be worn when handling this product. Protective gloves are those made from butyl rubber, nitrile rubber, or polyvinyl alcohol.

Appropriate hazard assessments in conjunction with an evaluation of the protection factors of chemical resistant gloves shall be performed to ensure

the protective properties remain intact. It is noted that the time to

breakdown of protection factors for different glove manufacturers varies. In the case of mixtures, the protection factors of chemical resistant gloves

may be impacted and deteriorate at unpredictable rates without understanding the impact of the substance and the specific protection

factors of the chemical resistant gloves.

RESPIRATORY PROTECTION: Ensure adequate ventilation. Respirator selection must be based on known

> or anticipated exposure levels, the hazards of the product, and the safe working limits of the selected respirator. Ensure the respirator is properly

fitted.

ENVIRONMENTAL EXPOSURE

**CONTROLS:** 

Dispose of raw and spent materials and wastes in compliance with all local, state, and federal regulations to prevent potential environmental contamination. Industrial air monitoring may be required to determine any potential environmental hazards to the atmosphere. This monitoring may

Natural-Therm TM MDI "A" COMPONENT

Revised Date: 1/27/2015

Draft: 1 SDS-055

result in the use of engineering and administrative controls such as filtering and scrubbing systems to mitigate or eliminate potential contaminants.

### SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid	FLASH POINT:	230°C (446°F)
COLOR:	Dark brown	<b>AUTO-IGNITION TEMP:</b>	>600°C (1,112°F)
ODOR:	Musty/earthy odor	DECOMPOSITION	$> 300^{\circ}\text{C} (572^{\circ}\text{F})$
		TEMPERATURE:	
ODOR THRESHOLD:	Not available	EXPLOSIVE LIMITS:	Not available
pH:	Not applicable	FLAMMABILITY:	Not available
WATER SOLUBILITY:	Insoluble in water	<b>BOILING POINT:</b>	$> 300^{\circ}\text{C} (572^{\circ}\text{F})$
PARTITION COEFFICIENT:	Not available	<b>BOILING RANGE:</b>	Not Available
SPECIFIC GRAVITY:	1.25 @ 25°C (77°F)	MELTING/FREEZING POINT:	Not Available
VISCOSITY:	$200 \pm 50 \text{ cps } @ 25^{\circ}\text{C}$	VAPOR PRESSURE:	10 <sup>-4</sup> mmHg @
	(77°F)		104°F (40°C)
<b>EVAPORATION RATE:</b>	Not available	VAPOR DENSITY:	Not Available
VOC:	Not available	RELATIVE DENSITY:	$10.4 \text{ lbs./gal} \pm 0.5$

### SECTION 10: STABILITY & REACTIVITY

**STABILITY:** This product is stable under normal conditions. Isocyanides 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 make brittle many

plastic and rubber materials.

**INCOMPATIBILITY:** Water - Reacts slowly, forming carbon dioxide and inert material

comprised of polyureas which could rupture closed containers. 4, 4'-methylene dianiline is formed as in intermediate product in this reaction. Above 50°C (122°F), the reaction becomes progressively more vigorous. Amines, Alcohols, Acids, and Bases may react violently with generation of heat. Metal compounds (e.g. organotin catalysts) may polymerize with

generation of heat and pressure.

**HAZARDOUS REACTION:** Polymeric MDI may undergo uncontrolled exothermic polymerization upon

contact with incompatible materials or if heated above 175-204°C (347°F – 399°F). The resulting pressure build-up could rupture closed containers.

May cause some corrosion to copper alloys and aluminum.

**CONDITIONS TO AVOID:** Avoid conditions of heat, moisture and direct sunlight.

**HAZARDOUS DECOMPOSITION:** By thermal decomposition and combustion, product may generate carbon

monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, dense smoke and irritating or toxic fumes. 4, 4' Methylene dianiline can be

formed by reaction of MDI with water.

Natural-Therm TM MDI "A" COMPONENT

Revised Date: 1/27/2015

Draft: 1 SDS-055

### **SECTION 11: TOXICOLOGY INFORMATION**

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE/ACUTE HEALTH EFFECTS:

**EYE CONTACT:** Causes serious eye irritation. Contact with liquid, mist and aerosols may

cause irritation with redness, swelling, pain, and watering of the eyes.

**SKIN CONTACT:** Causes skin irritation and may cause allergic skin reaction. Polymeric MDI

can cause mild irritation. Skin sensitization, resulting in dermatitis, may occur in some individuals. Application of single doses of 2.5, 3.9, 6.0 and 9.4 mg/kg Polymeric MDI to abraded skin of rabbits, under a cover for 24

hours, caused only minor, local, reversible skin changes.

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

Polymeric MDI has an extremely low vapor pressure and it is difficult to achieve vapor concentrations necessary for inhalation toxicity testing. Symptoms of severe irritation and deaths occurred at 13.6 mg/m<sup>3</sup>. Less severe irritation and no deaths occurred at 4.9 mg/m<sup>3</sup>. There were no visible

effects at 2.2 mg/m<sup>3</sup>.

**INGESTION:** Swallowing may result in irritation and corrosion of the mouth, throat, and

digestive tract.

#### **ACUTE TOXICITY:**

COMPONENT NAME	CAS Number	LD <sub>50</sub> Oral (mg/kg)	LD <sub>50</sub> Dermal (mg/kg)	LC <sub>50</sub> Inhalation (mg/m³/4hrs)
Polymethylene polyphenylene isocyanate (polymeric MDI)	9016-87-9	>10,000 (rat)	>6,200 (rabbit)	490 (rat) Aerosol
4,4'-Methylenediphenyl diisocyanate (MDI)	101-68-8	2,200 (mouse)	>10,000 (rabbit)	370 (rat) Aerosol

#### POTENTIAL CHRONIC EFFECTS

**CHRONIC EFFECTS:** Contains material that can cause target organ damage. Once sensitized, a

severe allergic reaction may occur when subsequently exposed to very low

levels.

**TARGET ORGANS:** Long-term, low-level exposure my cause severe, permanent respiratory

impairment.

**CARCINOGENICITY:** This material does not contain any component that is considered a human

carcinogen by the International Agency for Research on Cancer (IARC), American Conference of Governmental Industrial Hygienists (ACGIH), OSHA or the National Toxicology Program (NTP). IARC has concluded that polymeric MDI and MDI are not classifiable as to their carcinogenicity to humans (Group 3). Although lifetime inhalation of PMDI aerosols by rats resulted in a small number of benign adenomas, they are considered to be of unlikely relevance to occupational exposures. Such aerosols are not

encountered outside of the experimental laboratory.

Natural-Therm TM MDI "A" COMPONENT

Revised Date: 1/27/2015

Draft: 1 SDS-055

**MUTAGENICITY:** Not available.

**NEUROLOGICAL:** Not available.

**GENETIC:** Not available.

**TERATOGENICITY:** Not available.

**FERTILITY EFFECT:** Not available.

**DEVLEOPMENTAL EFFECTS:** Not available.

MEDICAL CONDITIONS AGGRAVATED BY OVER-

EXPOSURE:

Existing respiratory and skin conditions may be aggravated by

overexposure.

#### **SECTION 12: ECOLOGICAL INFORMATION**

**ENVIRONMENTAL EFFECTS:** Based on a review of the individual components this product may be

immediately harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment and is not readily biodegradable.

### **SECTION 13: DISPOSAL CONSIDERATION**

WASTE DISPOSAL: By-product wastes or process waste generation shall be eliminated and/or

minimized when possible. Do not dispose of any contaminants into sanitary sewer systems, storm drains, Publicly Owned Treatment Works (POTW), or any other municipal waste water treatment without written approval and agreements for processing wastes with such enterprises. Dispose of raw or unused materials, wastes, and/or by-products in accordance with all applicable local, state, and federal laws. Employ the expertise and knowledge of qualified personnel or contractors in disposal of any and all variants of this product. Ensure material containers are cleaned to the applicable standards before recycling, disposing, or reusing containers. Take special precautions to avoid any cross contamination and potential

unknown effects from mixing with other substances. Refer to SECTION 8: EXPOSTURE CONTROL/PERSONAL PROTECTION of this document for personal protection requirements. Disposal to the environment or in violation of environmental protection laws and statutes must be prevented.

### **SECTION 14: TRANSPORT INFORMATION**

#### **PROPER SHIPPING NAME:**

DOT:	Environmentally hazardous substance, liquid, n.o.s (contains: 4,4'-Methylenediphenyl diisocyanate)			
	*Single containers less than 5,000 lbs are not regulated			
TDG:	Not regulated.			
IMDG:	Not regulated.			
IATA:	Not regulated.			

Natural-Therm TM MDI "A" COMPONENT

Revised Date: 1/27/2015

Draft: 1 SDS-055

REGULATORY	UN	CLASSES	PG*	LABEL	ADDITIONAL INFORMATION
INFORMATION	NUMBER				
DOT Classification	NA3082	9	III		MDI reportable quantity: 5,000 lbs (2270kg) *Single containers less than 5,000lbs are not regulated

<sup>\*</sup>PG: Packaging group

This product could potentially contaminate aquatic and terrestrial environments if not handled in accordance with all precautions, regulations, and laws. Users, transporters, and all other applicable entities must review, follow, and apply any and all necessary precautions and procedures to eliminate and/or minimize potential hazards or risks to aquatic or terrestrial environments.

# **SECTION 15: REGULATORY INFORMATION**

#### **U.S. Federal Regulations**

This material is classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200)

**HCS Classification:** Irritant

Sensitizer

**TSCA 8b Inventory:** All components are listed on the TSCA inventory or are exempt.

TSCA 5a(2): None.

TSCA 5e: None.

TSCA 12b: None.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)

COMPONENT	CAS NUMBER	CONCENTRATION
4,4'-Methylenediphenyl	101-68-8	30-70%
diisocyanate (MDI)		

Clean Air Act – Ozone Depleting Substances (ODS): This product does not contain nor is it manufactured with ozone depleting substances.

SARA 313 Form R-Reporting Requirements:

COMPONENT	CAS NUMBER	Concentration
4,4'-Methylenediphenyl diisocyanate (MDI)	101-68-8	30-70%
Polymethylene polyphenyl isocyanate	9016-87-9	30-70%

Natural-Therm TM MDI "A" COMPONENT

Revised Date: 1/27/2015

Draft: 1 SDS-055

# **CERCLA Hazardous** substances:

COMPONENT	Concen- tration	Section 302	Section 313	Section 304 CERCLA	CERCLA reportable quantity	Product reportable quantity
4,4'- Methylenedi- phenyl diisocyanate (MDI)	30-70%	Not listed	Listed	Not listed	5,000lbs	7,142- 16,666 lbs
Polymethylene polyphenyl isocyanate	30- 70%	Not listed	Listed	Not listed	N/A	N/A

STATE REGULATIONS: PENNSYLVANIA, NEW

JERSEY, OR MASSACHUSETTS – RTK:

COMPONENT NAME	CAS NUMBER	CONCENTRATION
4,4'-Methylenediphenyl	101-68-8	30-70%
diisocyanate (MDI)		
Polymethylene polyphenyl	9016-87-9	30-70%
isocyanate		

California Prop 65:

This product contains no listed substances known to the State of California to cause cancer, birth defects, or other reproductive harm, at levels which would require a warning under the statute.

#### **CANADA:**

WHMIS (Canada):

COMPONENT NAME	CAS NUMBER	CONCENTRATION
4,4'-Methylenediphenyl	101-68-8	30-70%
diisocyanate (MDI)		

WHMIS Class D-1A: Immediate and serious toxic effects.

WHMIS Class D-2A: Material causing toxic effects (due to respiratory

sensitization).

**CEPA DSL:** All components are listed or exempted.

**INTERNATIONAL LISTS:** 

**Australia inventory (AICS):** All component substances are present on the inventory of Chemical Substances.

**China inventory (IECSC):** All component substances are present on the Chemical Inventory.

**Japan inventory:** All component substances are present on the inventory- Existing and New

Chemical Substances (ENCS). Polymeric MDI 7-872; Methylene diphenyl

diisocyanate 4-118.

**Korea inventory:** All component substances are present on the inventory- Existing and Evaluated

Chemical Substances. Polymeric MDI KE-21487; Methylene diphenyl diisocyanate

KE-23829.

Natural-Therm TM MDI "A" COMPONENT

Revised Date: 1/27/2015

Draft: 1 SDS-055

New Zealand inventory of Chemicals (NZIoC):

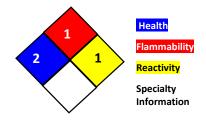
All component substances are present on the Chemical Inventory.

### **SECTION 16: OTHER INFORMATION**

4	Extreme	
3	Serious	
2	Moderate	
1	Slight	
0	No Hazard	
		1

**National Fire Protection Association (NFPA)** 

**Hazardous Material Information System (HMIS)** 



Health	2
Flammability	1
Reactivity	1
PPE	

Note: The customer is responsible for determining the PPE code for this material. At the time of publishing, the NFPA/HMIS and the New GHS scale had opposite scales of severity. Check the most recent publications for current information.

**Date of Issue:** 

1/27/2015

Date of previous issue: For Your Protection:

The information and recommendations in this publication is to the best of our knowledge, reliable. The toxicity and risk characteristics of products made by NP will necessarily differ from the toxicity and risk characteristics that occur when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors. The user is responsible to comply with all applicable federal, provincial or municipal laws and regulations. NP MAKES NO WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR

PURPOSE.

**Preparation Information:** This SDS supersedes <u>ALL</u> previous SDS versions.