

**SECTION 1: IDENTIFICATION**

|                          |   |
|--------------------------|---|
| <b>PRODUCT NAME</b>      | <b>POLYSHIELD HT™ SL “A” Component</b>                    |
| <b>CAS NUMBER</b>        | Not available   |
| <b>PRODUCT USE</b>       | Polyurea Coating  |
| <b>MANUFACTURER</b>      | Specialty Products, Inc. (SPI)                            |
| <b>ADDRESS</b>           | 2410 104th Street Ct S Suite D, Lakewood, WA 98499        |
| <b>PHONE</b>             | 253-588-7101 (800) 627-0773                               |
| <b>FAX</b>               | 253-588-7196  |
| <b>EMERGENCY CONTACT</b> | FOR SPILLS, LEAKS, FIRE, OR EXPOSURE CALL <b>CHEMTREC</b> |
| <b>TOLL FREE</b>         | <b>800-424-9300</b>                                       |
| <b>INTERNATIONAL</b>     | +1-703-527-3887   |
| <b>FAX</b>               | 913-321-1490  |

**SECTION 2: HAZARDS IDENTIFICATION**

**GHS LABEL ELEMENTS**  
 GHS PICTOGRAM



**DANGER**

**GHS CLASSIFICATION**

| CATEGORY  | HAZARD STATEMENTS |      |  |
|---|-------------------|------|--|
| Skin corrosion/irritation   | Category 2        | H315 | Causes skin irritation.  |
| Skin sensitization  | Category 1        | H317 | May cause an allergic skin reaction.   |
| Serious eye damage/eye irritation   | Category 2B       | H320 | Causes eye irritation.   |
| Acute toxicity inhalation   | Category 4        | H332 | Harmful if inhaled.  |
| Respiratory sensitization   | Category 1        | H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled.                     |
| Specific target organ toxicity (STOT), single exposure; respiratory tract | Category 3        | H335 | May cause respiratory irritation.  |
| Specific target organ toxicity (STOT), repeated exposure                  | Category 1        | H372 | Causes damage to organs (respiratory tract) through prolonged or repeated exposure if inhaled. |

**PRECAUTIONARY STATEMENTS**

**PREVENTION**

|      |  |
|------|--|
| P260 | Do not breathe dust/fume/gas/mist/vapors/spray.                            |
| P264 | Wash hands thoroughly after handling.                                      |
| P270 | Do not eat, drink, or smoke when using this product.                       |
| P271 | Use only outdoors or in a well-ventilated area.                            |
| P272 | Contaminated work clothing should not be allowed out of the workplace.     |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P285 | In case of inadequate ventilation wear respiratory protection.             |

**RESPONSE**

|                |  |
|----------------|--|
| P302+P352      | IF ON SKIN: Wash with plenty of soap and water.  |
| P321           | Specific treatment (as detailed in this SDS).  |
| P332+P313      | IF SKIN irritation occurs: Get medical advice/attention.   |
| P362           | Take off contaminated clothing and wash before reuse.  |
| P363           | Wash contaminated clothing before reuse.   |
| 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.  |
| P304+P340      | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.                                 |
| P312           | Call a POISON CENTER or doctor/physician if you feel unwell.   |
| P304+P312      | IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.   |
| P342+P311      | IF experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.  |
| P314           | Get medical advice/attention if you feel unwell.   |

**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 regional, national and local laws and regulations. |
|------|--|

**READ THE ENTIRE SDS FOR MORE THOROUGH EVALUATION OF THE HAZARDS**



### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| CHEMICAL NAME                                    | CAS NUMBER   | % WEIGHT |
|--|--------------|----------|
| Isocyanates, reaction product of polyol with MDI | *Proprietary | 10-30    |
| 2,4'-Diphenylmethane diisocyanate                | 5873-54-1    | 20-40    |
| 4,4'-Diphenylmethane diisocyanate                | 101-68-8     | 20-40    |
| Propylene carbonate                              | 108-32-7     | 1-10     |
| Polymethylene polyphenylene isocyanate           | 9016-87-9    | 1-5      |
| 2,2'-Diphenylmethane diisocyanate                | 2536-05-2    | 1-5      |

\*The specific chemical identity and exact percentage (concentration) is withheld as a trade secret per applicable regulations and statutes.

### SECTION 4: FIRST AID MEASURES

|                            |   |
|----------------------------|---|
| <b>EYE:</b>                | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.   |
| <b>SKIN:</b>               | After contact with skin, wash immediately with plenty of warm, soapy water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. A poly-glycol based skin cleanser or corn oil may be more effective than soap and water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| <b>INHALATION:</b>         | Move exposed person to fresh air. Get medical attention immediately. Treatment is symptomatic for primary irritation or bronchospasm. If breathing is labored, oxygen should be administered by qualified personnel.  |
| <b>INGESTION:</b>          | Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Provided the patient is conscious, wash out mouth with water. Get medical attention if symptoms appear.  |
| <b>NOTES TO PHYSICIAN:</b> | Symptomatic and supportive therapy as needed. Following severe exposure, medical follow-up should be monitored for 48 hours.  |

### SECTION 5: FIRE FIGHTING MEASURES

|  |   |
|--|---|
| <b>FLASH POINT:</b>                                    | Not available.  |
| <b>HAZARDS WHEN ON FIRE OR NEAR FLAME:</b>             | Closed container may forcibly rupture under extreme heat or when contents are contaminated with water (CO <sub>2</sub> formed).   |
| <b>SUITABLE EXTINGUISHING MEDIA:</b>                   | Dry chemical, carbon dioxide, or dry powder.  |
| <b>UNSUITABLE EXTINGUISHING MEDIA:</b>                 | Direct water spray.   |
| <b>SPECIAL EXPOSURE HAZARDS:</b>                       | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. If in a fire or heated, a pressure increase will occur and the container may rupture. |
| <b>SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:</b> | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. PVC boots, gloves, safety helmet, and protective clothing should be worn.                                     |
| <b>HAZARDOUS DECOMPOSITION:</b>                        | May produce toxic fumes of carbon dioxide, carbon monoxide, and/or nitrogen oxides when near heat source/flame.   |

### SECTION 6: ACCIDENTAL RELEASE MEASURES

|                                     |  |
|-------------------------------------|--|
| <b>ACCIDENTAL RELEASE MEASURES:</b> | For major spills call <b>CHEMTREC</b> : Toll free <b>1-800-424-9300</b> for international call <b>1-703-527-3887</b> .   |
| <b>PERSONAL PRECAUTIONS:</b>        | 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.   |
| <b>ENVIRONMENTAL PRECAUTIONS:</b>   | 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.  |
| <b>METHODS FOR CONTAINMENT:</b>     | 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.   |
| <b>METHODS FOR CLEANING UP:</b>     | 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). 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

|                  |  |
|------------------|--|
| <b>GENERAL:</b>  | Ideal storage temperature is 60-90°F (15-32°C). Handling and storage shall be in accordance with local, state/provincial, or federal regulations.  |
| <b>HANDLING:</b> | 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 containers. |
| <b>STORAGE:</b>  | Keep container tightly closed and properly sealed when stored. Keep contents away from moisture. Due to reaction with water producing CO <sub>2</sub> gas, a hazardous build-up of pressure could result if contaminated containers are resealed. DO NOT reseal contaminated containers. Uncontaminated containers, free of moisture, may be resealed and stored after purging the container with argon or nitrogen gas.   |

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| <b>EXPOSURE LIMITS:</b>                          |  |  |
|--|--|--|
| COMPONENT NAME                                   | CAS NUMBER   | EXPOSURE LIMITS  |
| Isocyanates, reaction product of polyol with MDI | *Proprietary   | Not available  |
| 2,4'-Diphenylmethane diisocyanate                | 5873-54-1  | Not available  |
| 4,4'-Diphenylmethane diisocyanate                | 101-68-8   | <b>ACGIH TLV</b><br>TWA: 0.005 ppm 8 hour(s)<br><b>OSHA PEL</b><br>CEIL: 0.02 ppm<br>CEIL: 0.2 mg/m <sup>3</sup><br><b>NIOSH REL</b><br>CEIL: 0.2 mg/m <sup>3</sup> 10 minute(s)<br>CEIL: 0.02 ppm 10 minute(s)<br>TWA: 0.05 mg/m <sup>3</sup> 10 hour(s)<br>TWA: 0.005 ppm 10 hour(s) |
| Propylene carbonate                              | 108-32-7   | Not available  |
| Polymethylene polyphenylene isocyanate           | 9016-87-9  | <b>ALBERTA CANADA TWA</b><br>TWA: 0.005 ppm<br>TWA: 0.07 mg/m <sup>3</sup>   |
| 2,2'-Diphenylmethane diisocyanate                | 2536-05-2  | Not available  |
| <b>ENGINEERING CONTROLS:</b>                     | 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.  |  |
| <b>HYGIENE MEASURES:</b>                         | 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 contaminants 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.  |  |
| <b>PERSONAL PROTECTIVE EQUIPMENT (PPE):</b>      |  |  |
| <b>EYE PROTECTION:</b>                           | Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield.  |  |
| <b>SKIN PROTECTION:</b>                          | 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.  |  |
| <b>HANDS PROTECTION:</b>                         | 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. |  |
| <b>RESPIRATORY PROTECTION:</b>                   | Ensure adequate ventilation. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).   |  |
| <b>ENVIRONMENTAL EXPOSURE CONTROLS:</b>          | 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 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**

|                               |                               |                                   |                  |
|-------------------------------|-------------------------------|-----------------------------------|------------------|
| <b>PHYSICAL STATE:</b>        | Liquid                        | <b>FLASH POINT:</b>               | Not available    |
| <b>COLOR:</b>                 | Clear yellow                  | <b>AUTO-IGNITION TEMPERATURE:</b> | Not available    |
| <b>ODOR:</b>                  | Slightly musty                | <b>DECOMPOSITION TEMPERATURE:</b> | Not available    |
| <b>ODOR THRESHOLD:</b>        | Not available                 | <b>EXPLOSIVE LIMITS:</b>          | Not explosive    |
| <b>pH:</b>                    | Not applicable                | <b>FLAMMABILITY:</b>              | Not available    |
| <b>WATER SOLUBILITY:</b>      | Not available                 | <b>BOILING POINT:</b>             | Not available    |
| <b>PARTITION COEFFICIENT:</b> | Not available                 | <b>BOILING RANGE:</b>             | Not available    |
| <b>SPECIFIC GRAVITY:</b>      | 1.11±0.005 g/cc @ 77°F (25°C) | <b>MELTING/FREEZING POINT:</b>    | Not available    |
| <b>VISCOSITY:</b>             | 650±50 cps @ 77°F (25°C)      | <b>VAPOR PRESSURE:</b>            | Not available    |
| <b>EVAPORATION RATE:</b>      | Not available                 | <b>VAPOR DENSITY:</b>             | Not available    |
| <b>VOC:</b>                   | Not available                 | <b>RELATIVE DENSITY:</b>          | 9.3±0.05 lbs/gal |

**SECTION 10: STABILITY & REACTIVITY**

|                                  |   |
|----------------------------------|---|
| <b>STABILITY:</b>                | Stable when handled and stored at temperatures 60-90°F (15-32°C).   |
| <b>INCOMPATIBILITY:</b>          | Incompatible with water, alcohols, amines, bases, and acids.  |
| <b>HAZARDOUS REACTION:</b>       | Exothermic reaction will occur when combined with sister component. Under normal conditions of storage and use, hazardous reactions will not occur. Reaction with water (moisture) produces CO <sub>2</sub> gas. An exothermic reaction with materials containing active hydrogen groups can occur. The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of the reaction partners is good or is supported by stirring or by the presence of solvents. This material is insoluble with, and heavier than, water and sinks to the bottom, but reacts slowly at the interface. A solid water insoluble layer of polyurea is formed at the interface by liberating carbon dioxide. |
| <b>HAZARDOUS POLYMERIZATION:</b> | Polymerization may occur at elevated temperatures in the presence of alkalis, tertiary amines and metal compounds. Under normal conditions of storage and use, hazardous polymerization should not occur.   |
| <b>CONDITIONS TO AVOID:</b>      | Avoid moisture contamination and high temperatures.   |

**SECTION 11: TOXICOLOGY INFORMATION**

|                              |  |
|------------------------------|--|
| <b>ACUTE HEALTH EFFECTS:</b> |  |
| <b>EYE CONTACT:</b>          | Causes eye irritation with symptoms of reddening, tearing, stinging, and swelling. May cause temporary corneal injury. Vapor or aerosol may cause irritation with symptoms of burning and tearing.   |
| <b>SKIN CONTACT:</b>         | Causes skin irritation with symptoms of reddening, itching, and swelling. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Cured material is difficult to remove. Contact with MDI can cause discoloration.  |
| <b>INHALATION:</b>           | Diisocyanate vapors or mist at concentrations above the TLV or PEL can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV or PEL with similar symptoms as well as asthma attack or asthma-like symptoms. Exposure well above the TLV or PEL may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g., fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible. The test atmosphere generated in the animal study is not representative of workplace environments, how the substance is placed on the market, and how it can reasonably be expected to be used. Therefore the test result cannot be directly applied for the purpose of assessing hazard. Based on expert judgment and the weight of the evidence, a modified classification for acute inhalation toxicity is justified. |
| <b>INGESTION:</b>            | May cause irritation of the digestive tract. Symptoms may include abdominal pain, nausea, vomiting, and diarrhea.  |

**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/L/4hrs) |
|--|------------|-------------------------------|---------------------------------|---|
| 2,4'-Diphenylmethane diisocyanate      | 5873-54-1  | >2,000 (rat)                  | >9,400 (rabbit)                 | 0.49 (rat)                              |
| 4,4'-Diphenylmethane diisocyanate      | 101-68-8   | >2,000 (rat)                  | >9,400 (rabbit)                 | 0.49 (rat)                              |
| Propylene carbonate                    | 108-32-7   | >33,520 (rat)                 | >2,000 (rabbit)                 | >5 (rat)                                |
| Polymethylene polyphenylene isocyanate | 9016-87-9  | >10,000 (rat)                 | >6,200 (rabbit)                 | 0.49 (rat)                              |
| 2,2'-Diphenylmethane diisocyanate      | 2536-05-2  | Not available                 | Not available                   | Not available                           |

|  |   |
|--|---|
| <b>POTENTIAL CHRONIC EFFECTS:</b>                      |   |
| <b>CHRONIC EFFECTS:</b>                                | As a result of previous repeated overexposures or a single large dose, certain individuals may develop sensitization to isocyanates (asthma or asthma-like symptoms) that may cause them to react to a later exposure to isocyanates at levels well below the TLV or PEL. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthmatic attack, could be immediate or delayed up to several hours after exposure. Extreme asthmatic reactions can be life threatening. Similar to many non-specific asthmatic responses, 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. Chronic overexposure to isocyanates has also been reported to cause lung damage (including fibrosis, decrease in lung function) that may be permanent., Prolonged contact with skin can cause reddening, swelling, rash, and, in some cases, skin sensitization. Animal tests and other research indicate that skin contact with MDI can play a role in causing isocyanate sensitization and respiratory reaction. This data reinforces the need to prevent direct skin contact with isocyanates. Prolonged vapor contact with the eyes may cause conjunctivitis. |
| <b>TARGET ORGANS:</b>                                  | Contains material which causes damage to the upper respiratory tract.   |
| <b>CARCINOGENICITY:</b>                                | As of this publication, this material is not listed on the National Toxic Program (NTP) Report of Carcinogens. Please refer to the most recent information with NTP. The material is classified on the International Agency for Research on Cancer (IARC) Monographs as Group 3. Exposure to levels of MDI, significantly above the threshold limit value (0.005 ppm), was shown to be related to the occurrence of lung tumors in a study using rats.  |
| <b>MUTAGENICITY:</b>                                   | No known significant effects or critical hazards.   |
| <b>TERATOGENICITY:</b>                                 | No known significant effects or critical hazards.   |
| <b>FERTILITY EFFECTS:</b>                              | No known significant effects or critical hazards.   |
| <b>DEVELOPMENTAL EFFECTS:</b>                          | No known significant effects or critical hazards.   |
| <b>MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE:</b> | Existing respiratory/pulmonary and skin conditions may be aggravated by overexposure.   |

**SECTION 12: ECOLOGICAL INFORMATION**

|                               |  |
|-------------------------------|--|
| <b>ENVIRONMENTAL EFFECTS:</b> | Based on a review of the individual components, this product has low ecotoxicity on aquatic organisms. When in contact with water an inert non-biodegradable solid will be produced. There is no evidence of bio-accumulation occurring. |
|-------------------------------|--|


**SECTION 13: DISPOSAL CONSIDERATION**

|                        |   |
|------------------------|---|
| <b>WASTE DISPOSAL:</b> | By-product wastes or process waste generation should 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 facility 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: EXPOSURE 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**

|                              |  |
|------------------------------|--|
| <b>PROPER SHIPPING NAME:</b> |  |
| <b>DOT:</b>                  | Other regulated substance, liquid, n.o.s. (contains: 4,4'-Diphenylmethane diisocyanate) *Single containers less than 5,000 lbs. are not regulated. |
| <b>TDG:</b>                  | Not regulated.   |
| <b>IMDG:</b>                 | Not regulated.   |
| <b>IATA:</b>                 | Not regulated.   |

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.

| REGULATORY INFORMATION | UN NUMBER | CLASSES | PG* | LABEL   | ADDITIONAL INFORMATION  |
|------------------------|-----------|---------|-----|---|---|
| DOT Classification     | NA3082    | 9       | III |  | Reportable quantity 5,000 lbs. (2,268 kg) Single containers less than 5,000 lbs. are not regulated. |

\*PG: Packaging group

## SECTION 15: REGULATORY INFORMATION

|   |   |                          |                      |                              |                                   |                                    |
|---|---|--------------------------|----------------------|------------------------------|-----------------------------------|------------------------------------|
| <b>U.S. Federal Regulations</b>   |   |                          |                      |                              |                                   |                                    |
| <b>TSCA 8b Inventory:</b>   | All components are listed on the TSCA inventory or are exempt.  |                          |                      |                              |                                   |                                    |
| <b>TSCA 5a (2):</b>   | No components listed.   |                          |                      |                              |                                   |                                    |
| <b>TSCA 5e:</b>   | No components listed.   |                          |                      |                              |                                   |                                    |
| <b>TSCA 12b:</b>  | No components listed.   |                          |                      |                              |                                   |                                    |
| <b>Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs):</b>  | <b>COMPONENT</b>  | <b>CAS NUMBER</b>        | <b>CONCENTRATION</b> |                              |                                   |                                    |
|   | 4,4'-Diphenylmethane diisocyanate   | 101-68-8                 | 20-40%               |                              |                                   |                                    |
| <b>Clean Air Act - Ozone Depleting Substances (ODS):</b>  | This product does not contain nor is it manufactured with ozone depleting substances.   |                          |                      |                              |                                   |                                    |
| <b>SARA 313 Form R - Reporting Requirements:</b>  | <b>COMPONENT</b>  | <b>CAS NUMBER</b>        | <b>CONCENTRATION</b> |                              |                                   |                                    |
|   | 4,4'-Diphenylmethane diisocyanate   | 101-68-8                 | 20-40%               |                              |                                   |                                    |
|   | Polymethylene polyphenylene isocyanate  | 9016-87-9                | 1-5%                 |                              |                                   |                                    |
| <b>SARA 311/312 hazard identification:</b>  | Immediate (acute) health hazard.<br>Delayed (chronic) health hazard.  |                          |                      |                              |                                   |                                    |
| <b>CERCLA Hazardous substances:</b>   |   |                          |                      |                              |                                   |                                    |
| <b>Component</b>  | <b>Concentration</b>  | <b>Section 302 (TPQ)</b> | <b>Section 313</b>   | <b>Section 304 CERCLA RQ</b> | <b>CERCLA reportable quantity</b> | <b>Product reportable quantity</b> |
| 4,4'-Diphenylmethane diisocyanate   | 20-40%  | Not listed               | Listed               | Not listed                   | 5,000 lbs                         | 15,000 lbs                         |
| Polymethylene polyphenylene isocyanate  | 1-5%  | Not listed               | Listed               | Not listed                   | Not available                     | Not available                      |
| <b>STATE REGULATIONS:</b>   |   |                          |                      |                              |                                   |                                    |
| <b>PENNSYLVANIA/NEW JERSEY/ MASSACHUSETTS - RTK:</b>  | <b>COMPONENT</b>  | <b>CAS NUMBER</b>        | <b>CONCENTRATION</b> |                              |                                   |                                    |
|   | 2,4'-Diphenylmethane diisocyanate   | 5873-54-1                | 20-40%               |                              |                                   |                                    |
|   | 4,4'-Diphenylmethane diisocyanate   | 101-68-8                 | 20-40%               |                              |                                   |                                    |
|   | Polymethylene polyphenylene isocyanate  | 9016-87-9                | 1-5%                 |                              |                                   |                                    |
| <b>California Prop 65:</b>  | This product does not contain a substance known to the State of California to cause birth defects or other reproductive harm at levels which would require a warning under the statute. |                          |                      |                              |                                   |                                    |
| <b>CANADA</b>   |   |                          |                      |                              |                                   |                                    |
| <b>WHMIS (Canada):</b>  | WHMIS Class D-1A: Material causing immediate and serious toxic effects (very toxic).<br>WHMIS Class D-2A: Material causing other toxic effects (very toxic).                            |                          |                      |                              |                                   |                                    |
| <b>CEPA DSL:</b>  | All components are listed or exempted.  |                          |                      |                              |                                   |                                    |
| <b>This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.</b> |   |                          |                      |                              |                                   |                                    |
| <b>INTERNATIONAL LISTS:</b>   |   |                          |                      |                              |                                   |                                    |
| <b>Australia inventory (AICS):</b>  | All components are listed or exempted.  |                          |                      |                              |                                   |                                    |
| <b>China inventory (IECSC):</b>   | All components are listed or exempted.  |                          |                      |                              |                                   |                                    |
| <b>Japan inventory:</b>   | All components are listed or exempted.  |                          |                      |                              |                                   |                                    |
| <b>Korea inventory:</b>   | All components are listed or exempted.  |                          |                      |                              |                                   |                                    |
| <b>New Zealand inventory of Chemicals (NZIoC):</b>  | All components are listed or exempted.  |                          |                      |                              |                                   |                                    |
| <b>Phillipines inventory (PICCS):</b>   | All components are listed or exempted.  |                          |                      |                              |                                   |                                    |

## SECTION 16: OTHER INFORMATION

| NFPA & HMIS |           |
|-------------|-----------|
| 4           | Extreme   |
| 3           | Serious   |
| 2           | Moderate  |
| 1           | Slight    |
| 0           | No Hazard |



### National Fire Protection Association (NFPA)



|                     |   |
|---------------------|---|
| HEALTH              | 1 |
| FLAMMABILITY        | 2 |
| REACTIVITY          | 1 |
| SPECIAL INFORMATION |   |

### Hazardous Material Information System (HMIS)

|                     |   |
|---------------------|---|
| HEALTH              | 2 |
| FLAMMABILITY        | 1 |
| REACTIVITY          | 1 |
| SPECIAL INFORMATION |   |

**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.**

|                                 |   |
|---------------------------------|---|
| <b>Date of Issue:</b>           | 11/7/2017   |
| <b>Date of previous issue:</b>  | 6/22/2017   |
| <b>For Your Protection:</b>     | The information and recommendations in this publication is to the best of our knowledge, reliable. The toxicity and risk characteristics of products made by SPI 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. SPI MAKES NO WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. |
| <b>Preparation Information:</b> | This SDS supersedes <b>ALL</b> previous SDS versions.   |