SAFETY DATA SHEET

PTU[™] "A" Component Revised Date: 10/16/2018 Version: 9 SDS-121

SECTION 1: IDENTIFICATION

PRODUCT NAME CAS NUMBER PRODUCT USE MANUFACTURER ADDRESS PHONE FAX EMERGENCY CONTACT TOLL FREE INTERNATIONAL FAX PTU[™] "A" Component Not available Polyurea Coating Specialty Products, Inc. (SPI) 2410 104TH ST. CT. S. STE D LAKEWOOD, WA 98499 253 588 7101 800 627 0773 253 588 7196 FOR SPILLS, LEAKS, FIRE, OR EXPOSURE CALL CHEMTREC 800 424 9300 +1 703 527 3887 913 321 1490

HAZARD STATEMENTS

SECTION 2: HAZARDS IDENTIFICATION

CATEGORY

GHS LABEL ELEMENTS

GHS PICTOGRAM



Category 1 H317 May cause an allero

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 2		Category 2B	H320	Causes eye irritation.	
Acute toxicity inhalation Category 4		Category 4	H332	Harmful if inhaled.	
Respiratory sensitization Ca		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	P260 Do not breathe dust/fume/gas/mist/vapors/sprav				

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.			

Dispose of contents/container in accordance with applicable regional, national and local laws and regulation

READ THE ENTIRE SDS FOR MORE THOROUGH EVALUATION OF THE HAZARDS



SECTION 3: COMPOSIT	ION/INFORMATION ON INGREDIENTS					
CHEMICAL NAME		CAS NUMBER	% WEIGHT			
lsocyantes, reaction product of	polyol with MDI	*Proprietary	10-30			
4,4'-Diphenylmethane diisocya	nate	101-68-8	20-40			
2,4'-Diphenylmethane diisocya	nate	5873-54-1	20-40			
Propylene carbonate		108-32-7	1-10			
Polymethylene polyphenylene		9016-87-9	1-10			
2,2'-Diphenylmethane diisocya		2536-05-2	1-5			
SECTION 4: FIRST AID	and exact percentage (concentration) is withheld as a trade secret per a	applicable regulations	and statutes.			
EYE:		inutes. Cot modical attent	on immodiately			
	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.					
SKIN:	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.					
INHALATION:	Move exposed person to fresh air. Get medical attention immediately. irritation or bronchospasm. If breathing is labored, oxygen should be a	Treatment is symptom administered by qualifie	atic for primary ed personnel.			
INGESTION:	Do not induce vomiting unless directed to do so by medical personnel. Never person. Provided the patient is conscious, wash out mouth with water. Get med	give anything by mouth to dical attention if symptoms	o an unconscious s appear.			
NOTES TO PHYSICIAN:	Symptomatic and supportive therapy as needed. Following severe exmonitored for 48 hours.	kposure, medical follow	-up should be			
SECTION 5: FIRE FIGHT	ING MEASURES					
FLASH POINT:	332°F (167°C).					
HAZARDS WHEN ON FIRE OR NEAR FLAME:	Closed container may forcibly rupture under extreme heat or when contents are contaminated with water (CO ₂ formed).					
SUITABLE EXTINGUISHING MEDIA:	Dry chemical, carbon dioxide, or dry powder.					
UNSUITABLE EXTINGUISHING MEDIA:	Direct water spray.					
SPECIAL EXPOSURE HAZARDS:	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.					
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:	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.					
SECTION 6: ACCIDENTA	AL RELEASE MEASURES					
ACCIDENTAL RELEASE MEASURES:	For major spills call CHEMTREC: Toll free 1-800-424-9300 for interna	itional call 1-703-527-3	887.			
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). 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			
GENERAL:	Ideal storage temperature is 60-90°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. Keep tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse containers.		
STORAGE:	Keep container tightly closed and properly sealed when stored. Keep contents away from moisture. Due to reaction with water producing CO ₂ 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

EXPOSURE LIMITS:

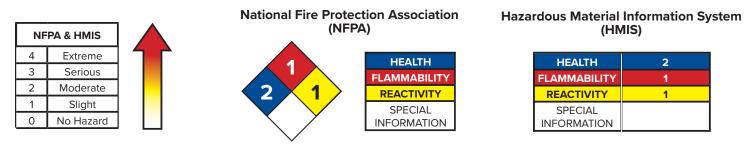
EXPOSURE LIMITS:					
COMPONENT NAME	CAS NUMBER	EXPOSURE LIMITS			
Isocyantes, reaction product of polyol with MDI	*Proprietary	Not available			
4,4'-Diphenylmethane diisocyanate	101-68-8	ACGIH TLV TWA: 0.005 ppm 8 hour(s) OSHA PEL CEIL: 0.02 ppm CEIL: 0.2 mg/m ³ NIOSH REL CEIL: 0.2 mg/m ³ 10 minute(s) CEIL: 0.02 ppm 10 minute(s) TWA: 0.05 mg/m ³ 10 hour(s) TWA: 0.005 ppm 10 hour(s)			
2,4'-Diphenylmethane diisocyanate	5873-54-1	Not available			
Propylene carbonate	108-32-7	Not available			
Polymethylene polyphenylene isocyanate	9016-87-9	ALBERTA CANADA TWA TWA: 0.005 ppm TWA: 0.07 mg/m ³			
2,2'-Diphenylmethane diisocyanate	2536-05-2	Not available			
ENGINEERING CONTROLS:	NGINEERING CONTROLS: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor, or mist, use enclosures, local exhaust ventilation, and other engineering controls to keep worker exposure to air 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 EQU	IPMENT (PPE):				
EYE PROTECTION:	to avoid exposure to liquid splash	n approved standard should be used when a risk assessment indicates this is necessary nes, mists, or dusts. If contact is possible, the following protection should be worn, unless r degree of protection: chemical splash goggles and/or face shield.			
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 it takes 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. 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 OSHA 29CFR 1910.134, NIOSH (US), or CEN (EU).				
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 result in the use of engineering and administrative controls such as filtering and scrubbing systems to mitigate or eliminate potential contaminants.				

SECTION 9: PHYSICAL & C	CHEMICAL PROPE	RTIES			
PHYSICAL STATE:	Liquid	FLASH POI	NT:	332°F (167°C)	
COLOR:	Amber	AUTO-IGNI	TION TEMPERATURE:	Not available	
ODOR:	Slightly musty	DECOMPO	SITION TEMPERATURE:	Not available	
ODOR THRESHOLD:	Not available	EXPLOSIVE	ELIMITS:	Not explosive	
pH:	Not applicable	FLAMMAB	LITY:	Not available	
WATER SOLUBILITY:	Not available	BOILING P	OINT:	Not available	
PARTITION COEFFICIENT:	Not available	BOILING R	ANGE:	Not available	
SPECIFIC GRAVITY:	1.19±0.005 g/cc @ 77°	F (25°C) MELTING/F	REEZING POINT:	Not available	
VISCOSITY:	600±100 mPa.s @ 77°	F (25°C) VAPOR PR	ESSURE:	Not available	
EVAPORATION RATE:	Not available	VAPOR DE	NSITY:	Not available	
VOC:	0 g/L	RELATIVE	DENSITY:	9.9±0.05 lbs/gal	
SECTION 10: STABILITY &	REACTIVITY				
STABILITY:	Stable when handled	and stored at temperature	es 60-90°F (15-32°C).		
INCOMPATIBILITY:	Incompatible with wat	er, alcohols, amines, base	es, and acids.		
HAZARDOUS REACTION:	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 ₂ 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. It 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.				
HAZARDOUS POLYMERIZATION:	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.				
CONDITIONS TO AVOID:	Avoid moisture contamination and high temperatures.				
HAZARDOUS DECOMPOSITION:	May produce toxic fumes of carbon dioxide, carbon monoxide, and/or nitrogen oxides when near heat source/flame.				
SECTION 11: TOXICOLOG	Y INFORMATION				
ACUTE HEALTH EFFECTS:					
EYE CONTACT:	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.				
	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.				
	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.				
	membranes in the respiral shortness of breath and re hyperreactivity can respor asthma-like symptoms. Ex edema (fluid in lungs). Che reported. These symptom test atmosphere generate placed on the market, and applied for the purpose of	tory tract (nose, throat, lungs) educed lung function (breath nd to concentrations below th posure well above the TLV of emical or hypersensitivity pne is can be delayed up to sever d in the animal study is not re how it can reasonably be es assessing hazard. Based or	a causing runny nose, sore throwing obstruction). Persons with the TLV or PEL with similar sym- or PEL may lead to bronchitis, le eumonitis, with flu-like sympto ral hours after exposure. These epresentative of workplace er- kpected to be used. Therefore	bat, coughing, chest discomfort, a preexisting, nonspecific bronchial ptoms as well as asthma attack or pronchial spasm and pulmonary ms (e.g., fever, chills), has also been se effects are usually reversible. The pvironments, how the substance is a the test result cannot be directly	
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INGESTION: ACUTE TOXICITY: COMPONENT NAME	membranes in the respiral shortness of breath and re hyperreactivity can respor asthma-like symptoms. Ex edema (fluid in lungs). Che reported. These symptom test atmosphere generate placed on the market, and applied for the purpose of classification for acute inho May cause irritation of th	tory tract (nose, throat, lungs) educed lung function (breath nd to concentrations below th posure well above the TLV of emical or hypersensitivity pne- is can be delayed up to sever d in the animal study is not re how it can reasonably be es- assessing hazard. Based or alation toxicity is justified. e digestive tract. Symptom	a causing runny nose, sore thra ing obstruction). Persons with he TLV or PEL with similar sym or PEL may lead to bronchitis, eumonitis, with flu-like sympto ral hours after exposure. These epresentative of workplace er spected to be used. Therefore expert judgment and the we s may include abdominal pa	bat, coughing, chest discomfort, a preexisting, nonspecific bronchial uptoms as well as asthma attack or pronchial spasm and pulmonary ms (e.g., fever, chills), has also been se effects are usually reversible. The hvironments, how the substance is the test result cannot be directly ight of the evidence, a modified	
INGESTION: ACUTE TOXICITY: COMPONENT NAME 4,4'-Diphenylmethane diisocyanate	membranes in the respiral shortness of breath and re hyperreactivity can respor asthma-like symptoms. Ex edema (fluid in lungs). Che reported. These symptom test atmosphere generate placed on the market, and applied for the purpose of classification for acute inhe May cause irritation of th	tory tract (nose, throat, lungs) educed lung function (breath nd to concentrations below th posure well above the TLV of emical or hypersensitivity pre- is can be delayed up to seve ed in the animal study is not re t how it can reasonably be es assessing hazard. Based or alation toxicity is justified. e digestive tract. Symptom	LD ₅₀ Dermal (mg/kg)	LC ₅₀ Inhalation (mg/L/4hrs)	
INGESTION: ACUTE TOXICITY: COMPONENT NAME 4,4'-Diphenylmethane diisocyanate 2,4'-Diphenylmethane diisocyanate	membranes in the respiral shortness of breath and re hyperreactivity can respor asthma-like symptoms. Ex edema (fluid in lungs). Che reported. These symptom test atmosphere generate placed on the market, and applied for the purpose of classification for acute inho May cause irritation of th CAS NUMBER 101-68-8 5873-54-1	tory tract (nose, throat, lungs) educed lung function (breath nd to concentrations below th posure well above the TLV of emical or hypersensitivity pre- is can be delayed up to seve d in the animal study is not re- t how it can reasonably be es- assessing hazard. Based or alation toxicity is justified. e digestive tract. Symptom LD ₅₀ Oral (mg/kg) >2,000 (rat)	a causing runny nose, sore thra ing obstruction). Persons with he TLV or PEL with similar sym or PEL may lead to bronchitis, eumonitis, with flu-like sympto ral hours after exposure. These epresentative of workplace er spected to be used. Therefore n expert judgment and the we s may include abdominal part LD ₅₀ Dermal (mg/kg) >9,400 (rabbit) >9,400 (rabbit)	bat, coughing, chest discomfort, a preexisting, nonspecific bronchial uptoms as well as asthma attack or pronchial spasm and pulmonary ms (e.g., fever, chills), has also been se effects are usually reversible. The vironments, how the substance is a the test result cannot be directly ight of the evidence, a modified in, nausea, vomiting, and diarrhea. LC₅₀ Inhalation (mg/L/4hrs) 0.49 (rat) 0.49 (rat)	
INGESTION: ACUTE TOXICITY:	membranes in the respiral shortness of breath and re hyperreactivity can respor asthma-like symptoms. Ex edema (fluid in lungs). Che reported. These symptom test atmosphere generate placed on the market, and applied for the purpose of classification for acute inhe May cause irritation of th CAS NUMBER 101-68-8	tory tract (nose, throat, lungs) educed lung function (breath nd to concentrations below th posure well above the TLV of emical or hypersensitivity pro- sis can be delayed up to sever ed in the animal study is not rr I how it can reasonably be ev assessing hazard. Based or alation toxicity is justified. e digestive tract. Symptom LD ₅₀ Oral (mg/kg) >2,000 (rat)	LD ₅₀ Dermal (mg/kg) >9,400 (rabbit)	bat, coughing, chest discomfort, a preexisting, nonspecific bronchial ptoms as well as asthma attack or pronchial spasm and pulmonary ms (e.g., fever, chills), has also been se effects are usually reversible. The twironments, how the substance is the test result cannot be directly ight of the evidence, a modified in, nausea, vomiting, and diarrhea. LC₅₀ Inhalation (mg/L/4hrs) 0.49 (rat)	

POTENTIAL CHRONIC EFFECTS:						
CHRONIC EFFECTS:	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 isocyanates. Prolonged vapor contact with the eyes may cause conjunctivitis.					
TARGET ORGANS:	Contains material v	vhich causes da	amage to	o the upper	r respiratory tract.	
CARCINOGENICITY:	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.					
MUTAGENICITY:	No known significa	nt effects or cri	tical haz	ards.		
TERATOGENICITY:	No known significa	nt effects or cri	tical haz	ards.		
FERTILITY EFFECTS:	No known significa	nt effects or cri	tical haz	ards.		
DEVELOPMENTAL EFFECTS:	No known significa	nt effects or cri	tical haz	ards.		
MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE:	Existing respiratory	/pulmonary and	d skin co	onditions m	ay be aggravated by overexposure.	
SECTION 12: ECOLOGICAI	INFORMATIO	N				
ENVIRONMENTAL EFFECTS:	When in contact with water an inert non-biodegradable solid will be produced. There is no evidence of bio-accumulation occurring.					
SECTION 13: DISPOSAL C	ONSIDERATION					
WASTE DISPOSAL:	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						
PROPER SHIPPING NAME:						
DOT:	Other regulated substance, liquid, n.o.s. (contains: 4,4'-Diphenylmethane diisocyanate) *Single containers less than 5,000 lbs. are not regulated.					
TDG:	Not regulated.					
IMDG:	Not regulated.					
IATA:	Not regulated.					
and laws. Users, transporters, and	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						
U.S. Federal Regulations							
TSCA 8b Inventory:	All components are listed on the TSCA inventory or are exempt.						
TSCA 5a (2):	No components listed.						
TSCA 5e:	No components lis	No components listed.					
TSCA 12b:	No components lis	ted.					
Clean Air Act Section 112(b)	СОМР	ONENT	CAS NUMBER		CONCENTRATION		
Hazardous Air Pollutants (HAPs):	4,4'-Diphenylmethane diisocyanate		101	101-68-8			
Clean Air Act - Ozone Depleting Substances (ODS):	This product does	not contain nor is it n	nanufactured with o	zone depleting subs	stances.		
SARA 313 Form R - Reporting	СОМР	ONENT	CASN	IUMBER	CONCENTRATION		
Requirements:	4,4'-Diphenylmetha	ane diisocyanate	101	-68-8	20-40%		
	Polymethylene polyphenylene isocyanate		901	9016-87-9			
SARA 311/312 hazard identification:	Immediate (acute) I Delayed (chronic) h	nealth hazard. nealth hazard.					
CERCLA Hazardous substances:							
Component	Concentration	Section 302	Section 313	Section 304	Reportable Quantity		
4,4'-Diphenylmethane diisocyanate	20-40%	Not listed	Listed	Not listed	5,000 lbs		
Polymethylene polyphenylene isocyanate	1-10%	Not listed	Listed	Not listed	Not available		
STATE REGULATIONS:							
PENNSYLVANIA/NEW JERSEY/	COMPONENT		CAS	IUMBER	CONCENTRATION		
MASSACHUSETTS - RTK:	2,4'-Diphenylmethane diisocyanate		5873-54-1		20-40%		
	4,4'-Diphenylmethane diisocyanate		101-68-8		20-40%		
	Polymethylene polyphenylene isocyanate		9016-87-9		1-10%		
California Prop 65:		This product contains no listed substances known to the State defects, or other reproductive harm, at levels which would re-					
CANADA	•						
WHMIS (Canada):WHMIS Class D-1A: Material causing immediate and serious toxic effects (very toxic).WHMIS Class D-2A: Material causing other toxic effects (very toxic).							
CEPA DSL:	All components are listed or exempted.						
This product has been classified in the information required by the Co			he Controlled Prod	ucts Regulations ar	nd the SDS contains all		
INTERNATIONAL LISTS:							
Australia inventory (AICS):	All components are	e listed or exempted.					
China inventory (IECSC):	All components are	e listed or exempted.					
Japan inventory:	All components are	e listed or exempted.					
Korea inventory:	All components are	e listed or exempted.					
	All components are listed or exempted.						
New Zealand inventory of Chemicals (NZIoC):	All components are	e listed or exempted.					

SECTION 16: OTHER 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.

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 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.
Preparation Information:	This SDS supersedes ALL previous SDS versions.