

## **SAFETY DATA SHEET**

K5™ UB "A" Component Revised Date: 10/16/2018 Version: 7 SDS-066

#### **SECTION 1: IDENTIFICATION**

PRODUCT NAME **CAS NUMBER PRODUCT USE MANUFACTURER ADDRESS PHONE** FAX **EMERGENCY CONTACT TOLL FREE** 

INTERNATIONAL

FAX

K5™ UB "A" Component Not available

Polyurea Coating

Specialty Products, Inc. (SPI)

2410 104TH ST. CT. S. STE D LAKEWOOD, WA 98499

800 627 0773 253 588 7101

253 588 7196

FOR SPILLS, LEAKS, FIRE, OR EXPOSURE CALL CHEMTREC

800 424 9300 +1 703 527 3887 913 321 1490

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

#### **GHS LABEL ELEMENTS**

**GHS PICTOGRAM** 





## **DANGER**

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.				





SECTION 2. COMPOSIT	ION/INFORMATION ON INCREDIENTS			
	ION/INFORMATION ON INGREDIENTS			
CHEMICAL NAME		CAS NUMBER	% WEIGHT	
Polyurethane	*Proprietary	50-80		
2,4'-Diphenylmethane diisocya	5873-54-1 101-68-8	1-10		
4,4'-Diphenylmethane diisocyal		1-10 1-5		
Isocyanates, reaction product of Propylene carbonate	n polyol with Midi	*Proprietary 108-32-7	1-10	
2,2'-Diphenylmethane diisocya	nato	2536-05-2	1-5	
	and exact percentage (concentration) is withheld as a trade secret per a			
SECTION 4: FIRST AID		pplicable regulations	and statutes.	
EYE:	In case of contact, immediately flush eyes with plenty of water for at least 15 mir	nutes. Get medical attenti	ion immediately.	
SKIN:	After contact with skin, wash immediately with plenty of warm, soapy water. Rer Continue to rinse for at least 10 minutes. A poly-glycol based skin cleanser or co water. Get medical attention if symptoms occur. Wash clothing before reuse. Cle	orn oil may be more effec	ctive than soap and	
INHALATION:	Move exposed person to fresh air. Get medical attention immediately. irritation or bronchospasm. If breathing is labored, oxygen should be a			
INGESTION:	Do not induce vomiting unless directed to do so by medical personnel. Never of person. Provided the patient is conscious, wash out mouth with water. Get med	give anything by mouth to lical attention if symptom:	o an unconscious s appear.	
NOTES TO PHYSICIAN:	Symptomatic and supportive therapy as needed. Following severe ex monitored for 48 hours.	posure, medical follow	<i>ı</i> -up should be	
SECTION 5: FIRE FIGHT	ING MEASURES			
FLASH POINT:	384°F (196°C).			
HAZARDS WHEN ON FIRE OR NEAR FLAME:	Closed container may forcibly rupture under extreme heat or when contents are contaminated with water (CO <sub>2</sub> 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.			
<b>SECTION 6: ACCIDENTA</b>	L RELEASE MEASURES			
ACCIDENTAL RELEASE MEASURES:	For major spills call <b>CHEMTREC</b> : Toll free <b>1-800-424-9300</b> for internated	ional call <b>1-703-527-3</b>	887.	
PERSONAL PRECAUTIONS:	Wear appropriate personal protective equipment recommended in SE PERSONAL PROTECTION of this SDS. Immediately contact emergence upwind avoiding inhalation of vapors. Clean-up should only be perform dealing with major spillages should wear full protective clothing include	ly personnel. Evacuate med by trained persor	e the area. Keep nnel. People	
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 absorbent carrier (such as vermiculite, earth, or sand). DO NOT USE c Shovel into open-top drums or plastic bags for further decontaminatio dispose of residues. Dispose of via a licensed waste disposal contrac CONSIDERATIONS) Notify applicable government authorities if release	ombustible materials s n, if necessary. Remo tor (See SECTION 13: I	such as sawdust. ve and properly	
METHODS FOR CLEANING UP:	Only proceed with clean up by taking the appropriate personal protection surrounding area does not contain further hazards that could worsen the sharm (i.e. eliminate any ignition sources). Move any non-contaminated, no if it can be done safely. Dike, dam, or further restrict and stop active leaks to individuals, the environment, and/or structures. Contain and collect spill CONSIDERATIONS for disposal information and SECTION 8: EXPOSURE Commended Personal Protective Equipment (PPE). Obey all local, state,	spill, cause migration, or n-leaking containers fro without posing further o lage. See SECTION 13: CONTROL/ PERSONAL	cause further om the spill zone damage or harm DISPOSAL PROTECTION for	

SECTION 7: HANDLING	G & 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 <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		
EXPOSURE LIMITS:		

EXPOSURE LIMITS:				
COMPONENT NAME	CAS NUMBER	EXPOSURE LIMITS		
Polyurethane	*Proprietary	Not available		
2,4'-Diphenylmethane diisocyanate	5873-54-1	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/m³ NIOSH REL CEIL: 0.2 mg/m³ 10 minute(s) CEIL: 0.02 ppm 10 minute(s) TWA: 0.05 mg/m³ 10 hour(s) TWA: 0.005 ppm 10 hour(s)		
Isocyanates, reaction product of polyol with MDI	*Proprietary	Not available		
Propylene carbonate	108-32-7	Not available		
2,2'-Diphenylmethane diisocyanate	2536-05-2	Not available		
ENGINEERING CONTROLS:	enclosures, local exhaust ve	tilation. If user operations generate dust, fumes, gas, vapor, or mist, use process ntilation, and other engineering controls to keep worker exposure to airborne ommended 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	IIPMENT (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, 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.			
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:		. If the respirator is the sole means of protection, use a full-face supplied respirator. Use tested and approved under appropriate government standards such as OSHA 29CFR I (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 & CHEMICAL PROPERTIES					
PHYSICAL STATE:	Liquid	FLASH POI	NT:	384°F (196°C)	
COLOR:	Clear yellow	AUTO-IGNI	TION TEMPERATURE:	Not available	
ODOR:	Slightly musty	DECOMPO	SITION TEMPERATURE:	Not available	
ODOR THRESHOLD:	Not available	EXPLOSIVE	LIMITS:	Not explosive	
pH:	Not applicable	FLAMMABI	LITY:	Not available	
WATER SOLUBILITY:	Not available	BOILING PO	OINT:	Not available	
PARTITION COEFFICIENT:	Not available	BOILING RA	ANGE:	Not available	
SPECIFIC GRAVITY:	1.15±0.005 g/cc @ 77°F (25°C)	MELTING/F	REEZING POINT:	Not available	
VISCOSITY:	1,400±100 mPa.s @ 77°F (25°C)	VAPOR PRI	ESSURE:	Not available	
EVAPORATION RATE:	Not available	VAPOR DEI	NSITY:	Not available	
VOC:	0 g/L	RELATIVE D	DENSITY:	9.6±0.05 lbs/gal	
<b>SECTION 10: STABILITY 8</b>	REACTIVITY				
STABILITY:	Stable when handled and store	d at temperature	es 60-90°F (15-32°C).		
INCOMPATIBILITY:	Incompatible with water, alcoho	ls, amines, base	s, 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 <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. 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 a	and high tempera	atures.		
HAZARDOUS DECOMPOSITION:	May produce toxic fumes of carbon dioxide, carbon monoxide, and/or nitrogen oxides when near heat source/flame.				
SECTION 11: TOXICOLOGY INFORMATION					
ACUTE HEALTH EFFECTS:					
ACUTE HEALTH EFFECTS:  EYE CONTACT:	Causes eye irritation with sympt corneal injury. Vapor or aerosol	oms of reddenin	g, tearing, stinging, and swe	elling. May cause temporary ng and tearing.	
	Causes eye irritation with sympt corneal injury. Vapor or aerosol  Causes skin irritation with sympt experience allergic skin reaction difficult to remove. Contact with	oms of reddenin with symptoms	ion with symptoms of burning, itching, and swelling. Per of reddening, itching, swell	ng and tearing.	
EYE CONTACT:	Causes skin irritation with symptox experience allergic skin reaction	may cause irritations of reddenin with symptoms MDI can cause centrations above those, throat, lungs) g function (breathientrations below the TLV o ypersensitivity pneelayed up to seve ilmal study is not reasonably be exhazard. Based on	ion with symptoms of burning, itching, and swelling. Per of reddening, itching, swell discoloration.  The TLV or PEL can irritate (burning obstruction). Persons with a ne TLV or PEL with similar sympor PEL may lead to bronchitis, with flu-like symptom ral hours after exposure. These persentative of workplace encypected to be used. Therefore	rsons previously sensitized can ing, and rash. Cured material is and sensation the mucous at, coughing, chest discomfort, preexisting, nonspecific bronchial otoms as well as asthma attack or ronchial spasm and pulmonary as (e.g., fever, chills), has also been a effects are usually reversible. The vironments, how the substance is the test result cannot be directly	
EYE CONTACT:  SKIN CONTACT:	corneal injury. Vapor or aerosol  Causes skin irritation with sympt experience allergic skin reactior difficult to remove. Contact with  Diisocyanate vapors or mist at concumembranes in the respiratory tract (is shortness of breath and reduced lur hyperreactivity can respond to concustima-like symptoms. Exposure we edema (fluid in lungs). Chemical or reported. These symptoms can be of test atmosphere generated in the air placed on the market, and how it ca applied for the purpose of assessing	may cause irritations of reddenin with symptoms MDI can cause centrations above those, throat, lungs) g function (breathientrations below the TLV oxpersensitivity pneelayed up to seven in reasonably be explained. Based on city is justified.	ion with symptoms of burning, itching, and swelling. Per of reddening, itching, swell discoloration.  The TLV or PEL can irritate (burning obstruction). Persons with a me TLV or PEL with similar sympor PEL may lead to bronchitis, be burnonitis, with flu-like symptom ral hours after exposure. These expresentative of workplace enverse to be used. Therefore to expert judgment and the weig	resons previously sensitized can ing, and rash. Cured material is an gensation) the mucous at, coughing, chest discomfort, preexisting, nonspecific bronchial atoms as well as asthma attack or ronchial spasm and pulmonary as (e.g., fever, chills), has also been a effects are usually reversible. The vironments, how the substance is the test result cannot be directly and the substance, a modified	
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EYE CONTACT:  SKIN CONTACT:  INHALATION:  INGESTION:  ACUTE TOXICITY:  COMPONENT NAME  Polyurethane	Causes skin irritation with sympt experience allergic skin reaction difficult to remove. Contact with Diisocyanate vapors or mist at concementation of the digestive statement of the concentration of the digestive can be determined for the purpose of assessing classification for acute inhalation tox  CAS NUMBER  *Proprietary  LD <sub>50</sub> *Proprietary  LD <sub>50</sub> *Proprietary	may cause irritations of reddenin with symptoms MDI can cause of entrations above those, throat, lungs) g function (breathientrations below the TLV oxypersensitivity pneelayed up to seven irreasonably be exhazard. Based on city is justified.  Prail (mg/kg)  1,000 (rat)	ion with symptoms of burning, itching, and swelling. Per of reddening, itching, swell discoloration.  The TLV or PEL can irritate (burning obstruction). Persons with a ne TLV or PEL with similar sympor PEL may lead to bronchitis, per per may lead to bronchitis, with flu-like symptom ral hours after exposure. These expresentative of workplace envergence to be used. Therefore to expert judgment and the weight smay include abdominal pair above.  LD <sub>50</sub> Dermal (mg/kg)  >5,000 (rabbit)	rsons previously sensitized can ing, and rash. Cured material is and sensation the mucous at, coughing, chest discomfort, preexisting, nonspecific bronchial otoms as well as asthma attack or ronchial spasm and pulmonary as (e.g., fever, chills), has also been a effects are usually reversible. The vironments, how the substance is the test result cannot be directly and of the evidence, a modified and, nausea, vomiting, and diarrhea.  LC <sub>50</sub> Inhalation (mg/L/4hrs)  Not available	
EYE CONTACT:  SKIN CONTACT:  INHALATION:  INGESTION:  ACUTE TOXICITY:  COMPONENT NAME  Polyurethane 2,4'-Diphenylmethane diisocyanate	Causes skin irritation with sympt experience allergic skin reaction difficult to remove. Contact with Diisocyanate vapors or mist at concembranes in the respiratory tract (is shortness of breath and reduced lur hyperreactivity can respond to concasthma-like symptoms. Exposure we edema (fluid in lungs). Chemical or reported. These symptoms can be of test atmosphere generated in the air placed on the market, and how it ca applied for the purpose of assessing classification for acute inhalation tox  May cause irritation of the digestive CAS NUMBER  *Proprietary  5873-54-1	may cause irritations of reddenin with symptoms MDI can cause centrations above those, throat, lungs) g function (breathientrations below the TLV or spersensitivity pneelayed up to seven imal study is not ren reasonably be exhazard. Based on city is justified.  The properties of th	ion with symptoms of burning, itching, and swelling. Per of reddening, itching, swell discoloration.  The TLV or PEL can irritate (burning obstruction). Persons with a me TLV or PEL with similar sympore PEL may lead to bronchitis, but it is with flu-like symptom real hours after exposure. These epresentative of workplace enverse to be used. Therefore to expert judgment and the weight is may include abdominal pair above.  LD <sub>50</sub> Dermal (mg/kg)  >5,000 (rabbit)	resons previously sensitized can ing, and rash. Cured material is and sensation the mucous at, coughing, chest discomfort, preexisting, nonspecific bronchial atoms as well as asthma attack or ronchial spasm and pulmonary as (e.g., fever, chills), has also been a effects are usually reversible. The vironments, how the substance is the test result cannot be directly and of the evidence, a modified an, nausea, vomiting, and diarrhea.  LC <sub>50</sub> Inhalation (mg/L/4hrs)  Not available  0.49 (rat)	
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EYE CONTACT:  SKIN CONTACT:  INHALATION:  INGESTION:  ACUTE TOXICITY:  COMPONENT NAME  Polyurethane 2,4'-Diphenylmethane diisocyanate 4,4'-Diphenylmethane diisocyanate	Causes skin irritation with sympt experience allergic skin reaction difficult to remove. Contact with Diisocyanate vapors or mist at concembranes in the respiratory tract (is shortness of breath and reduced lur hyperreactivity can respond to concasthma-like symptoms. Exposure we edema (fluid in lungs). Chemical or reported. These symptoms can be of test atmosphere generated in the air placed on the market, and how it ca applied for the purpose of assessing classification for acute inhalation tox  May cause irritation of the digestive  CAS NUMBER  *Proprietary  5873-54-1  22  *Proprietary  No	may cause irritations of reddenin with symptoms MDI can cause of entrations above those, throat, lungs) g function (breathientrations below the III above the TLV of the III above the III a	ion with symptoms of burning, itching, and swelling. Per of reddening, itching, swelling itching, swelling itching, swelling itching, swelling itching, swelling itching itchi	rsons previously sensitized can ing, and rash. Cured material is and sensation the mucous at, coughing, chest discomfort, preexisting, nonspecific bronchial atoms as well as asthma attack or ronchial spasm and pulmonary as (e.g., fever, chills), has also been a effects are usually reversible. The vironments, how the substance is the test result cannot be directly and of the evidence, a modified an, nausea, vomiting, and diarrhea.  LC <sub>50</sub> Inhalation (mg/L/4hrs)  Not available  0.49 (rat)	

POTENTIAL CHRONIC EFFECTS	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 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.			
TARGET ORGANS:	Contains material which causes damage to the upper 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 significant effects or critical hazards.			
TERATOGENICITY:	No known significant effects or critical hazards.			
FERTILITY EFFECTS:	No known significant effects or critical hazards.			
DEVELOPMENTAL EFFECTS:	No known significant effects or critical hazards.			
MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE:	Existing respiratory/pulmonary and skin conditions may be aggravated by overexposure.			

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

**ENVIRONMENTAL EFFECTS:** 

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**

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.

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					

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 listed.				
TSCA 12b:	No components listed.				
Clean Air Act Section 112(b)	COMPONENT CAS NUMBER CONCENTRAT			CONCENTRATION	
Hazardous Air Pollutants (HAPs):	4,4'-Diphenylmetha	4,4'-Diphenylmethane diisocyanate		-68-8	1-10%
Clean Air Act - Ozone Depleting Substances (ODS):	This product does not contain nor is it manufactured with ozone depleting substances.				tances.
SARA 313 Form R - Reporting	СОМР	ONENT	CAS N	UMBER	CONCENTRATION
Requirements:	4,4'-Diphenylmetha	ne diisocyanate	101	-68-8	1-10%
SARA 311/312 hazard identification:	Immediate (acute) h Delayed (chronic) h				•
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
STATE REGULATIONS:					
PENNSYLVANIA/NEW JERSEY/	COMPONENT		CAS N	UMBER	CONCENTRATION
MASSACHUSETTS - RTK:	2,4'-Diphenylmethane diisocyanate		5873-54-1		20-40%
	4,4'-Diphenylmethane diisocyanate		101-68-8		20-40%
California Prop 65:	This product contains less than 0.1% of a chemical known to the State of California to cause cancer.			nia to cause cancer.	
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).				
WHMIS (Canada):	WHMIS Class D-1A: WHMIS Class D-2A	Material causing imr : Material causing oth	nediate and seriou ner toxic effects (ve	s toxic effects (very t ry toxic).	oxic).
WHMIS (Canada):  CEPA DSL:	WHMIS Class D-2A	Material causing imr : Material causing oth listed or exempted.	nediate and seriou ner toxic effects (ve	s toxic effects (very t ry toxic).	oxic).
	WHMIS Class D-2A All components are accordance with the	: Material causing oth listed or exempted.	ner toxic effects (ve	ry toxic).	
CEPA DSL: This product has been classified in	WHMIS Class D-2A All components are accordance with the	: Material causing oth listed or exempted.	ner toxic effects (ve	ry toxic).	
CEPA DSL:  This product has been classified in the information required by the Cor	WHMIS Class D-2A All components are accordance with the atrolled Products Re	: Material causing oth listed or exempted.	ner toxic effects (ve	ry toxic).	
CEPA DSL: This product has been classified in the information required by the CollinterNATIONAL LISTS:	All components are accordance with the atrolled Products Re	: Material causing oth listed or exempted. : hazard criteria of th gulations.	ner toxic effects (ve	ry toxic).	
CEPA DSL: This product has been classified in the information required by the CollinterNATIONAL LISTS: Australia inventory (AICS):	All components are	Material causing oth listed or exempted. hazard criteria of the gulations.	ner toxic effects (ve	ry toxic).	
CEPA DSL: This product has been classified in the information required by the CollinterNATIONAL LISTS: Australia inventory (AICS): China inventory (IECSC):	All components are	Material causing oth listed or exempted.  hazard criteria of the gulations.  listed or exempted.  listed or exempted.	ner toxic effects (ve	ry toxic).	
CEPA DSL:  This product has been classified in the information required by the CollinterNATIONAL LISTS:  Australia inventory (AICS):  China inventory (IECSC):  Japan inventory:	All components are	Material causing oth listed or exempted.  hazard criteria of the gulations.  listed or exempted.  listed or exempted.  listed or exempted.	ner toxic effects (ve	ry toxic).	

## **SECTION 16: OTHER INFORMATION**

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



# National Fire Protection Association (NFPA)



HEALTH	
FLAMMABILIT	Υ
REACTIVITY	
SPECIAL	
INFORMATION	1

# Hazardous Material Information System (HMIS)

HEALTH	2
<b>FLAMMABILIT</b>	Y 1
REACTIVITY	1
SPECIAL	
INFORMATION	I

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 <b>ALL</b> previous SDS versions.