

SAFETY DATA SHEET

POLYSHIELD HT™ TRAFFIC COAT "A" Component

Revised Date: 1/5/2016

Version: 2 SDS-255

SECTION 1: IDENTIFICATION

PRODUCT NAME CAS NUMBER PRODUCT USE MANUFACTURER

ADDRESS PHONE

FAX

EMERGENCY CONTACT

TOLL FREE INTERNATIONAL FAX

POLYSHIELD HT™ TRAFFIC COAT "A" Component

Not available Polyurea Coating

Specialty Products, Inc. (SPI)

2410 104th Street Ct S Suite 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

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION

GHS PICTOGRAM





NEW GHS SCALE

GHS SCALE				
1	Extreme			
2	Serious			
3	Moderate			
4	Slight			
	Moderate			







DANGER













EMERGENCY OVERVIEW

	HAZARD STATEMENTS	PRECAUTIONARY STATEMENTS				
H335	May cause respiratory irritation.	P264	Wash hands thoroughly after handling.			
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	P280	Wear protective gloves/protective clothing/eye protection/face protection.			
H332	Harmful if inhaled.	P261	Avoid breathing dust/fumes/gas/mist/vapors /spray.			
H320	Causes eye irritation.	P271	Use only out doors or in a well-ventilated area.			
H315	Causes skin irritation.	P270	Do not eat, drink, or smoke when using this product.			
H317	May cause an allergic skin reaction.	P285	In case of inadequate ventilation wear respiratory protection.			
H303	May be harmful if swallowed.					

APPEARANCE, COLOR, ODOR:

Liquid, clear yellow, slightly musty.

USA: This material is considered hazardous to health by the OSHA Hazard Communication Standard (29 CFR 1910-1200).

READ THE ENTIRE SDS FOR MORE THOROUGH EVALUATION OF THE HAZARDS

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS		
CHEMICAL NAME	CAS NUMBER	% WEIGHT
Methyloxirane polymer	157937-75-2	30-60
Diphenylmethane 4, 4'-diisocyanate	101-68-8	13-30
Diphenylmethane 2,4'-diisocyanate	5873-54-1	13-30
Propylene carbonate	108-32-7	7-13



SECTION 4: FIRST	AID MEASURE	S TOTAL TOTA			
EYE: H320		Causes eye irritation. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do, continue rinsing. IF eye irritation persists: Get medical advice/attention.			
SKIN: H315/317		Causes skin irritation and may cause an allergic skin reaction. IF ON SKIN: wash with plenty of soap and water. IF SKIN irritation or rash occurs: Get medical advice/attentior Wash contaminated clothing before use.			
INHALATION:	H332/334	Harmful if inhaled and may cause allergy or asthma symptoms or breathing difficulties if inhaled. IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.			
INGESTION:	H303	May be harmful if swallowed. IF SWALLOWED: Rinse mouth. Do not induce vomiting. Call a POISON CENTER or doctor/physician IF you feel unwell.			
NOTES TO PHYSIC	CIAN:	Symptomatic and supportive therapy as needed. Following severe exposure, medical follow-up should be monitored for 48 hours.			
SECTION 5: FIRE F	FIGHTING MEAS	URES			
FLASH POINT:		Closed cup: >230°F (>110°C)			
HAZARDS WHEN NEAR FLAME:	ON FIRE OR	May produce toxic fumes of carbon dioxide, carbon monoxide, nitrogen oxides, hydrocarbons, and HCN. When in a closed container, pressure will increase which may lead to a rupture of the container.			
SUITABLE EXTING MEDIA:	GUISHING	Use dry powder, carbon dioxide, or alcohol resistant foam.			
UNSUITABLE EXTINGUISHING MEDIA:		Water may be used if no other extinguishing media available. Reaction between water and hot isocyanate may be vigorous.			
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: ACCIE	DENTAL RELEAS	E MEASURES			
ACCIDENTAL REL MEASURES:	EASE	For major spills call CHEMTREC : Toll free 1-800-424-9300 for international call 1-703-527-3887 .			
PERSONAL PRECAUTIONS:		Wear appropriate personal protective equipment recommended in SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION of this SDS. Immediately contact emergency personnel. Evacuate the area. Keep upwind avoiding inhalation of vapors. Clean-up should only be performed by trained personnel. People dealing with major spillages should wear full protective clothing including respiratory protection.			
ENVIRONMENTAL PRECAUTIONS:		This material may contaminate the environment without proper control and response to spills. Ensure spilled material does not come in contact with soil, waterway, drains, sewers, or other runoff that would further disperse the material. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, 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

ECTION 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. Kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse containers.			
STORAGE:	Keep containers properly sealed and when stored indoors, in a dry and well-ventilated area. 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: COMPONENT NAME CAS NUMBER **EXPOSURE LIMITS** 157937-75-2 Not available Methyloxirane polymer ACGIH TLV (United States, 3/2012) TWA: 0.005 ppm 8 hour(s) Diphenylmethane 101-68-8 4,4'-diisocyanate OSHA PEL (United States, 6/2010) CEIL: 0.02 ppm CEIL: 0.2 mg/m³ NIOSH REL (United States, 12/2001) 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) 5873-54-1 Diphenylmethane Not available 2,4'-diisocyanate 108-32-7 Propylene carbonate Not available

ENGINEERING CONTROLS:	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor, or mist, use process enclosures, local exhaust ventilation, and other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.						
HYGIENE MEASURES:	Wash hands, forearms, and face thoroughly with plenty of soap and water after handling chemical products, before eating, smoking, and using the restroom and at the end of the working period. Appropriate engineering, administrative, and other best practice decontamination control measures must be used to isolate contaminates on clothing and to prevent unintended migration of contaminants. Handle clothing and other potentially contaminated material appropriately and in compliance with local, state, and federal regulations in the process of removing, washing/cleaning, and reuse of these potentially contaminated materials. Ensure compliant use and location of eyewash station and safety showers.						
PERSONAL PROTECTIVE E	QUIPMENT (PPE):						
EYE PROTECTION:	indicates this is necessary to a possible, the following protecti	n an approved standard should be used void exposure to liquid splashes, mists ion should be worn, unless the assessr al splash goggles and/or face shield.	, or dusts. If contact is				
SKIN PROTECTION:		t for the body should be selected base and should be approved by an industri					
HANDS PROTECTION:	Chemical resistant gloves complying with applicable health and safety standards shall be worn when handling this product. Protective gloves are those made from butyl rubber, nitrile rubber, or polyvinyl alcohol. Appropriate hazard assessments in conjunction with an evaluation of the protection factors of chemical resistant gloves shall be performed to ensure the protective properties remain intact. It is noted that the time to breakdown of protection factors for different glove manufacturers varies. In the case of mixtures, the protection factors of chemical resistant gloves may be impacted and deteriorate at unpredictable rates without understanding the impact of the substance and the specific protection factors of the chemical resistant gloves.						
RESPIRATORY PROTECTION:	Ensure adequate ventilation. 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).						
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	SECTION 9: PHYSICAL & CHEMICAL PROPERTIES						
PHYSICAL STATE:	TE: Liquid FLASH POINT: >230°F (>110°C)						
COLOR:	Clear yellow	AUTO-IGNITION TEMPERATURE:	>1,112°F (>600°C)				
ODOR:	Slightly musty	DECOMPOSITION TEMPERATURE:	Not available				
ODOR THRESHOLD:	Not available	EXPLOSIVE LIMITS:	Not explosive				
pH:	Not applicable	FLAMMABILITY:	Not available				
WATER SOLUBILITY:	Not available BOILING POINT: >572°F (>300°C)						
PARTITION COEFFICIENT:	Not available BOILING RANGE: Not available						
SPECIFIC GRAVITY:	1.14±0.005 g/cc @ 77°F (25°C)	MELTING/FREEZING POINT:	Not available				
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VAPOR PRESSURE:

RELATIVE DENSITY:

VAPOR DENSITY:

Not available

Not available

9.50±0.05 lbs/gal

350±50 cps @ 77°F (25°C)

Not available

Not available

VOC:

VISCOSITY:

EVAPORATION RATE:

SECTION 10: STABILITY &	REACTIVITY					
STABILITY:	Stable when hand	ed and stored at tempera	atures 60-90°F (15-32°C)).		
INCOMPATIBILITY:	Incompatible with	ncompatible with water, alcohols, amines, bases, and acids.				
HAZARDOUS REACTION:	or by the presence bottom but reacts	Reaction with water produces CO ₂ gas. Exothermic reaction with materials containing active hydrogen groups. The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of the reaction partners is good or supported by stirring or by the presence of solvents. MDI is insoluble with and heavier than water and sinks to the pottom but reacts slowly at the interface. A solid water insoluble layer of polyurea is formed at the interface by liberating carbon dioxide gas.				
HAZARDOUS POLYMERIZATION:	Polymerization ma	y occur at elevated temp	eratures.			
CONDITIONS TO AVOID:	Avoid high temper	atures.				
HAZARDOUS DECOMPOSITION:	Combustion producyanide.	icts may include: carbon o	oxides, nitrogen oxides,	hydrocarbons and hydrogen		
SECTION 11: TOXICOLOGY	Y INFORMATION					
ACUTE HEALTH EFFECTS:						
EYE CONTACT:	Causes eye irritati	on.				
SKIN CONTACT:	Causes skin irritati	on and may cause an alle	ergic skin reaction.			
INHALATION:	Harmful if inhaled, breathing difficulti	Harmful if inhaled, may cause respiratory irritation, and may cause allergy or asthma symptoms or breathing difficulties if inhaled.				
INGESTION:	May be harmful if	swallowed.				
ACUTE TOXICITY:						
COMPONENT NAME	CAS NUMBER	LD ₅₀ Oral (mg/kg)	LD ₅₀ Dermal (mg/kg)	LC ₅₀ Inhalation (mg/m³/4hrs)		
Methyloxirane polymer	157937-75-2 >10,000 (rat) >9,400 (rabbit) 490 (rat)					
Diphenylmethane 4,4'-diisocyanate	101-68-8	>10,000 (rat)	>9,400 (rabbit)	490 (rat)		
Diphenylmethane 2,4'-diisocyanate	5873-54-1	Not available	>9,400 (rabbit)	490 (rat)		
Propylene carbonate	108-32-7	> 33,520 (rat)	>2,000 (rabbit)	Not available		
POTENTIAL CHRONIC EFFEC	TS:		-			
CHRONIC EFFECTS:		that can cause target org ur when subsequently ex				
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. In a study with rats exposure of MDI significantly above the threshold limit value was related to the occurrence of lung tumors.					
MUTAGENICITY:	No known signific	ant effects or critical haza	ards.			
TERATOGENICITY:	No known signific	ant effects or critical haza	ards.			
FERTILITY EFFECTS:	No known signific	ant effects or critical haza	ards.			
DEVELOPMENTAL EFFECTS:	No birth defects were seen in two independent animal (rat) studies. Fetotoxicity was observed at doses that were extremely toxic (including lethal) to the mother. Fetotoxicity was not observed at doses that were not maternally toxic. The doses used in these studies were maximal, respirable concentrations, which are well in excess of defined occupational exposure limits.					
MEDICAL CONDITIONS	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 and not readily biodegradable. When in contact with water an inert non-biodegradable solid will be produced. The potential to bio-accumulate is low.

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: Diphenylmethane 4,4'- 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					

SECTION 15: REGULATORY IN	IFORMATION					
U.S. Federal Regulations						
This material is considered hazardo	ous to health under	OSHA Haza	rd Commur	nication Standard	d (29 CFR 1910.120	O)
HCS Classification:	Irritant Sensitizer				·	
TSCA 8b Inventory:	All components ar	e listed on th	ne TSCA inv	ventory or are ex	empt.	
TSCA 5a (2):	No components lis	sted.				
TSCA 5e:	No components lis	sted.				
TSCA 12b:	No components lis	sted.				
Clean Air Act Section 112(b) Hazardous Air Pollutants	COMPONI	ENT	CAS	NUMBER	CONCEN	TRATION
(HAPs):	Diphenylmethane 4,4'-diisocyanate		10)1-68-8	13-3	0%
Clean Air Act - Ozone Depleting Substances (ODS):	This product does	not contain	nor is it ma	nufactured with	ozone depleting s	ubstances.
SARA 313 Form R - Reporting Requirements:	COMPONI	ENT	CAS	NUMBER	CONCEN	TRATION
Requirements.	Methyloxirane polymer		157937-75-2		30-60%	
	Diphenylmethane 4,4'-diisocyanate		101-68-8		13-30%	
	Diphenylmethane 2,4'-diisocyanate		58	73-54-1	13-3	0%
SARA 311/312 hazard identification:	Immediate (acute)	health haza	rd.			
CERCLA Hazardous substances	5:					
Component	Concentration	Section 302 (TPQ)	Section 313	Section 304 CERCLA RQ	CERCLA reportable quantity	Product reportable quantity
Diphenylmethane 4,4'-diisocyanate	13-30%	Not listed	Listed	Listed	5,000 lbs	20,000 lbs
STATE REGULATIONS:						
PENNSYLVANIA/NEW JER- SEY/MASSACHUSETTS - RTK:	COMPONENT		CAS NUMBER		CONCENTRATION	
SET/MASSACHUSETTS - RTK:	Diphenylmethane 101-68-8 13-30% 4,4'-diisocyanate				0%	
California Prop 65:	This product contains less than 0.1% of a substance known to the State of California to cause cancer, birth defects, or other reproductive harm, at levels which would require a warning under the statute.					
CANADA						
	WHMIS Class D-24	A: Material c	ausing othe	r toxic effects (v	ery toxic).	

CEPA DSL:	At least one component is not listed.				
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.					
INTERNATIONAL LISTS:					
Australia inventory (AICS):	Not determined.				
China inventory (IECSC):	Not determined.				
Japan inventory:	Not determined.				
Korea inventory:	Not determined.				
New Zealand inventory of Chemicals (NZIoC):	Not determined.				
Phillipines inventory (PICCS):	Not determined.				

SECTION 16: OTHER INFORMATION

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



National Fire Protection Association (NFPA)





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.

Date of Issue:	1/5/2016
Date of previous issue:	11/30/2015
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.