HUNTSMAN BUILDING SOLUTIONS

U-255PW A SAFETY DATA SHEET - A-SIDE

SECTION 1: PRODUCT & COMPANY INFORMATION	
Supplier / Manufacturer: Huntsman Building Solutions 3315 E. Division Street, Arlington, TX 76011 Phone: 817-640-4900 / Fax: 817-633-2000 E-mail: Info@huntsmanbuildscom / Web: www.huntsmanbuildingsolutions.com	GHS Product Identifier: Coatlok [™] U255PW A-side Chemical Name: Diphenylmethane Diisocyanate Product Type: Liquid Identified Use: Component A of a Spray-Applied Polyurea System

Emergency Telephone in USA: CHEMTREC 800-424-9300. In Canada: CANUTEC 613-996-6666 or *666 (cellular).

SECTION 2: HAZARDS IDENTIFICA	TION
OSHA / HCS Status	This material is classified hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the Substance or Mixture	Acute Toxicity (Inhalation) - Category 2 Skin Corrosion / Irritation - Category 2 Serious Eye Damage / Eye Irritation - Category 2A Respiratory Sensitization - Category 1 Skin Sensitization - Category 1 Carcinogenicity - Category 2 Specific Target Organ Toxicity (Single Exposure) (Respiratory tract irritation) - Category 3 Specific Target Organ Toxicity (Repeated Exposure) - Category 2
GHS LABEL ELEMENTS INCLUDIN	G PRECAUTIONARY STATEMENTS
Hazard Pictograms	
Signal Word	Danger
Hazard Statements	 H330 - Fatal if inhaled. H319 - Causes serious eye irritation. H315 - Causes skin irritation. H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317 - May cause an allergic skin reaction. H351 - Suspected of causing cancer. H335 - May cause respiratory irritation. H373 - May cause damage to organs through prolonged or repeated exposure.
PRECAUTIONARY STATEMENTS	
Prevention	 P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P281 - Use personal protective equipment as required. P280 - Wear protective gloves. Wear eye or face protection. P284 - Wear respiratory protection. P285 - In case of inadequate ventilation wear respiratory protection. P271 - Use only outdoors or in a well-ventilated area. P260 - Do not breathe vapor. P264 - Wash hands thoroughly after handling. P272 - Contaminated work clothing should not be allowed out of the workplace.
Response	 P314 - Get medical attention if you feel unwell. P308 + P313 - IF exposed or concerned: Get medical attention. P304 + P340 + P310 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or physician. P302 + P352 + P362-2 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse.

	 P333 + P313 - If skin irritation or rash occurs: Get medical attention. 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 attention.
Storage	P405 - Store locked up.
Disposal	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)			
Physical Hazards Not Otherwise Classified (PHNOC) None known.			
Health Hazards Not Otherwise Classified (HHNOC)	None known.		

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS									
Substance / Mixture	Mixture	Aixture							
Chemical Name	Diphenylmethane Diisocyanate	Diphenylmethane Diisocyanate							
CAS NUMBER / OTHER IDENTIFIERS									
CAS Number	Number Not applicable.								
Product Code	Not available.								
INGREDIENTS		CAS #	%						
4,4'-Methylenediphenyl diisocyanate		101-68-8	30 - 60						
Poly[oxy(methyl-1,2-ethanediyl)], i-hyd isocyanatobenzene]	dro-¶-hydroxy-, polymer with 1,1'-methylenebis[4-	9048-57-1	30 – 60						
Benzene, 1,1'-methylenebis[4-isocya	nato-, homopolymer	25686-28-6	7 – 13						
o-(p-lsocyanatobenzyl)phenyl isocyan	ate	5873-54-1	0.1 – 1						

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: FIRST AID MEASURES

DESCRIPTION OF NECESSARY FIRST AID MEASURES

Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.
Inhalation	Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
Skin Contact	Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

MOST IMPORTANT SYMPTON	MS / EFFECTS, ACUTE AND DELAYED		
POTENTIAL ACUTE HEALTH	EFFECTS		
Eye Contact	Causes serious eye irritation.		
Inhalation	Fatal if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.		
Skin Contact	Causes skin irritation. May cause an allergic skin reaction.		
Ingestion	Irritating to mouth, throat and stomach.		
OVER-EXPOSURE SIGNS / SY	/MPTOMS		
Eye Contact	Adverse symptoms may include the following: pain or irritation, watering, redness.		
Inhalation	Adverse symptoms may include the following: respiratory tract irritation, coughing, wheezing and breathing difficulties, asthma.		
Skin Contact	Adverse symptoms may include the following: irritation, redness.		
Ingestion	No known significant effects or critical hazards.		
INDICATION OF IMMEDIATE	MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY		
Notes to Physician	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.		
Specific Treatments	No specific treatment.		
Protection of First-aiders No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing wear gloves.			
See toxicological information (S	ection 11)		

SECTION 5: FIRE FIGHTING MEASURES							
Suitable Extinguishing Media	Foam, CO ₂ , or dry powder.						
Unsuitable Extinguishing Media	Water may be used if no other available and then in copious quantities. Reaction between water and hot isocyanate may be vigorous. Prevent washings from entering water courses.						
Specific Hazards Arising from the Chemical	In a fire or if heated, a pressure increase will occur and the container may burst. Use water spray to keep fire-exposed containers cool.						
Hazardous Thermal Decomposition Products	Combustion products may include: carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN.						
Special Protective Actions for Fire Fighters	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.						
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.						
Remark	Due to reaction with water producing CO ₂ -gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Containers may burst if overheated.						

SECTION 6: ACCIDENTAL RELEASE MEASURES PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES For Non-emergency Personnel No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. For Emergency Responders If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". Environmental Precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Spill	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
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SECTION 7: HANDLING & STORAGE

PRECAUTIONS FOR SAFE HANDLI	NG
Storage Temperature	59 – 86°F (15 – 30°C)
Storage Life	6 months
Protective Measures	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on General Occupational Hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
Conditions for Safe Storage Including any Incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well- ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

CONTROL PARAMETERS – UNITED STATES

OCCUPATIONAL EXPOSURE LIMITS

Ingredient Name	Exposure Limits				
4,4'-Methylenediphenyl diisocyanate	ACGIH TLV (United States, 3/2015). TWA: 0.005 ppm 8 hours. NIOSH REL (United States, 10/2013). CEIL: 0.2 mg/m ³ 10 minutes. CEIL: 0.02 ppm 10 minutes. TWA: 0.05 mg/m ³ 10 hours. TWA: 0.005 ppm 10 hours. OSHA PEL (United States, 2/2013). CEIL: 0.2 mg/m ³ CEIL: 0.02 ppm				
o-(p-Isocyanatobenzyl)phenyl isocyanate	OSHA PEL (United States). TWA: 0.005 ppm 8 hours. CEIL: 0.02 ppm				

CONTROL PARAMETERS - CANADA

OCCUPATIONAL EXPOSURE LIMITS		TWA (8 HOURS)		STEL (15 MINS)			CEILING				
Ingredients Name	List Name	ppm	mg/m³	other	ppm	mg/m³	other	ppm	mg/m³	other	notations
	US ACGIH 3/2015	0.005	-	-	-	-	-	-	-	-	
4,4'-	AB 4/2009	0.005	0.05	-	-	-	-	-	-	-	
Methylenediphenyl diisocyanate	BC 2/2015	0.005	-	-	-	-	-	0.01	-	-	(1) (3)
	ON 7/2015	0.005	-	_	_	-	-	_	-	_	
	QC 1/2014	0.005	0.051	_	-	-	_	-	-	-	(3)
	BC 2/2015	0.005	_	-	_	_	_	0.01	-	-	

o-(p- Isocyanatobenzyl)phe nyl isocyanate		0.005	_	-	_	_	_	0.02	_	_	
(1) Absorbed through skin. (3) S	Skin sensitization.										
Appropriate Engineering Controls		Jse only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.				keep worker					
Environmental Exposure Controls	Emissions from environmental p			ocess equip	ment shou	d be check	ed to ensu	re they corr	ply with the	e requireme	nts of
INDIVIDUAL PROTECTION ME	EASURES										
Hygiene Measures	and at the Contamin	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.									
Eye/Face Protection	avoid exp	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, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.									
Hand Protection	chemical manufact breakthro	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.									
Body Protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved ar should be approved by a specialist before handling this product.				ks involved and						
Other Skin Protection		Appropriate footwear and any additional skin protection measures should be selected based on the task being performed an the risks involved and should be approved by a specialist before handling this product.			performed and						
Respiratory Protection	Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.										

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES				
Physical State	Liquid			
Color	Transparent, yellow			
Odor	Not available			
Odor Threshold	Not available			
рН	Not available			
Melting Point	Not available			
Boiling Point	> 572°F (> 300°C). Decomposes.			
Flash Point	Closed cup: > 230°F (110°C)			
Evaporation Rate	Not available			
Flammability (solid, gas)	Not available			
Lower and Upper Explosive (flammable) Limits	Not available			
Vapor Pressure	Not available			
Vapor Density	Not available			
Specific Gravity @ 77°F (25°C)	1.09 – 1.15			
Solubility	Not soluble in water. Reacts with water to release carbon dioxide.			
Partition Coefficient: N-Octanol/Water	Not available			
Auto-Ignition Temperature	> 1112°F (> 600°C)			

Decomposition Temperature	Not available
Viscosity @ 77°F (25°C)	1000 – 1400 cps
Volatility	Not available

SECTION 10: STABILITY & REACTIVITY					
Reactivity	No specific test data related to reactivity available for this product or its ingredients.				
Chemical Stability	Stable at room temperature. This product will react and release heat with any materials containing active hydrogen. The reaction is accelerated and can be violent at higher temperatures if the miscibility of the reaction partners is good or is supported by stirring, 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 CO ₂ .				
Possibility of Hazardous Reactions	Polymerization may occur at elevated temperatures in the presence of alkalis, tertiary amines and metal compounds.				
Conditions to Avoid	Avoid high temperatures.				
Incompatible Materials	Water, alcohols, amines, bases, and acids.				
Hazardous Decomposition Products	Isocyanate vapors and other irritating, highly toxic gases such as carbon dioxide, carbon monoxide, nitrogen oxides, hydrocarbons and HCN.				

SECTION 11: TOXICOLOGICAL INFO	DRMATION							
ACUTE TOXICITY								
Product / Ingredient Name	Endpoint			Species Result			Exposure	
4,4'-Methylenediphenyl diisocyanate	LD50 Oral			Rat		9200 mg/kg]	-
IRRITATION / CORROSION								
Product / Ingredient Name	Result			Species		Score	Exposure	Observation
4,4'-Methylenediphenyl diisocyanate	Eyes – Moderate irritar	ıt		Rabbit		-	100 mg	-
SENSITIZATION								
There is no data available.								
MUTAGENICITY								
There is no data available.								
CARCINOGENICITY								
CLASSIFICATION								
Product / Ingredient Name	OSHA	IARC	N	ГР	A	CGIH	EPA	NIOSH
4,4'-Methylenediphenyl diisocyanate	-	3	-	-		-	_	_
REPRODUCTIVE TOXICITY								
There is no data available.								
TERATOGENICITY								
There is no data available.								
SPECIFIC TARGET ORGAN TOXICIT	Y (SINGLE EXPOSURE	Ξ)						
Product / Ingredient Name	Category		Route of Exposure			Target Organs		
4,4'-Methylenediphenyl diisocyanate	Category 3		Not Applicable			Respiratory tract irritation		
o-(p-lsocyanatobenzyl)phenyl isocyanate	Category 3	Category 3		Not Applicable			Respiratory tract irritation	
Benzene, 1,1'-methylenebis[4- isocyanato-, homopolymer]	Category 3	Category 3			Not Applicable		Respiratory tract irritation	
SPECIFIC TARGET ORGAN TOXICIT	Y (REPEATED EXPOSI	JRE)						
Product / Ingredient Name	Category		Route of Exposure			Target Organs		

4,4'-Methylenediphenyl diisocyanate	Category 2	Not Determined	Not Determined	
o-(p-lsocyanatobenzyl)phenyl isocyanate	Category 2	Not Determined	Not Determined	
Benzene, 1,1'-methylenebis[4- isocyanato-, homopolymer]	Category 2	Inhalation	Respiratory system	
ASPIRATION HAZARD	·			
There is no data available.				
INFORMATION ON THE LIKELY ROU	TES OF EXPOSURE			
Dermal contact. Eye contact. Inhalation	. Ingestion.			
POTENTIAL ACUTE HEALTH EFFECT	TS			
Eye Contact	Causes serious eye irritation.			
	Fatal if inhaled. May cause respiratory irrita Exposure to decomposition products may			
Skin Contact	Causes skin irritation. May cause an allergi	c skin reaction.		
Ingestion	Irritating to mouth, throat and stomach.			
SYMPTOMS RELATED TO THE PHYS	SICAL, CHEMICAL AND TOXICOLOGICAL	L CHARACTERISTICS		
Eye Contact	Adverse symptoms may include the followi	ing: pain or irritation, watering, redness.		
Inhalation	Adverse symptoms may include the following: respiratory tract irritation, coughing, wheezing and breathing difficulties, asthma.			
Skin Contact	Adverse symptoms may include the following: irritation, redness.			
Ingestion	No known significant effects or critical hazards.			
DELAYED AND IMMEDIATE EFFECTS	S AND ALSO CHRONIC EFFECTS FROM	SHORT AND LONG TERM EXPOSURE		
SHORT TERM EXPOSURE				
Potential Immediate Effects	No known significant effects or critical haza	ards.		
Potential Delayed Effects	No known significant effects or critical haza	ards.		
LONG TERM EXPOSURE				
Potential Immediate Effects	No known significant effects or critical haza	ards.		
Potential Delayed Effects	No known significant effects or critical haza	ards.		
POTENTIAL CHRONIC HEALTH EFFE	ECTS			
	May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.			
Carcinogenicity	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.			
Mutagenicity	No known significant effects or critical haza	ards.		
Teratogenicity	No known significant effects or critical hazards.			
Developmental Effects	No known significant effects or critical hazards.			
Fertility Effects	No known significant effects or critical haza	ards.		
NUMERICAL MEASURES OF TOXICI	TY - ACUTE TOXICITY ESTIMATES			
Route	ATE Value			
Inhalation (dust and mist)	1.507 mg/l			

SECTION 12: ECOLOGICAL INFORMATION			
TOXICITY			
Product / Ingredient Name	Result	Species	Exposure
4,4'-Methylenediphenyl diisocyanate	Acute LC50 1.5 mg/l	Algae	72 hours

PERSISTENCE AND DEGRADAB	LITY				
There is no data available.					
BIOACCUMULATIVE POTENTIAL					
Product / Ingredient Name	Product / Ingredient Name LogPow BCF Potential				
4,4'-Methylenediphenyl diisocyanate		4.51	200	Low	
o-(p-lsocyanatobenzyl)phenyl isocyanate		4.51	200	Low	
Benzene, 1,1'-methylenebis[4-isoc	Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer]		200	Low	
MOBILITY IN SOIL					
Soil/Water Partition Coefficient (Koc)	There is no data available.	There is no data available.			
Other Adverse Effects	No known significant effects of critical hazards.				

SECTION 13: DISPOSAL CONSIDERATION					
Disposal Methods	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by- products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.				

SECTION 14: TRANSPORTATION INFORMATION				
DOT				
UN Number	UN3082			
UN Proper Shipping Name	Other regulated substances, Liquid, N.O.S. (Diphenylmethane diisocyanate)			
Transport Hazard Class(es)	9 e			
Packing Group				
Additional Information	Reportable quantity 5000 lbs. (2270 kg). Single containers less than 5000 lbs. are not regulated.			
TDG				
Not regulated.				
IMDG				
Not regulated.				

ΙΑΤΑ	
Not regulated.	
Special Precautions for User	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code	Not available.

SECTION 15: REGULATORY INFORMATION			
UNITED STATES			
U.S. Federal Regulations TSCA 8(a) PAIR: 4,4'-Methylenediphenyl diisocyanate; o-(p-Isocyanatobenzyl)phenyl isocyanate.			

	TSCA 8(c) calls for record of SAR: 4,4'-Methylenediphenyl diisocyanate; o-(p-Isocyanatobenzyl)phenyl isocyanate. United States inventory (TSCA 8b): All components are listed or exempted. Clean Water Act (CWA) 307: 4,4'-Methylenediphenyl diisocyanate.							
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	Listed							
Clean Air Act Section 602 Class I Substances	Not listed							
Clean Air Act Section 602 Class II Substances	Not listed							
DEA List I Chemicals (Precursor Chemicals)	Not listed							
DEA List II Chemicals (Essential Chemicals)	Not listed							
SARA 302/304	•							
No products were found								
SARA 311/312								
CLASSIFICATION								
Immediate (acute) health hazard. Dela	yed (chronic) health h	azard.						
COMPOSITION / INFORMATION ON	INGREDIENTS							
Product / Ingredient Name	%	Fire Hazard	Sudden Release of Pressure	Reactive	Immedia [:] Health H	te (acute) azard	Delayed (chronic) Health Hazard	
4,4'-Methylenediphenyl diisocyanate	30 - 60	No	No	No	Yes		Yes	
o-(p-lsocyanatobenzyl)phenyl isocyanate	0.1 – 1	No	No	No	Yes		Yes	
SARA 313					•		·	
	Product / Ingredient Name CAS # %							
Form R – Reporting Requirements	4,4'-Methylenediphenyl diisocyanate			101-68-8		30 - 60	30 - 60	
Supplier Notification	4,4'-Methylenediphenyl diisocyanate			101-68-8 30 - 6		30 – 60	0	
SARA 313 notifications must not be d attached to copies of the SDS subsec		S and any copying an	d redistribution of the	SDS shall include cop	oying and r	redistributic	on of the notice	
STATE REGULATIONS								
Massachusetts	The following components are listed: 4,4'-Methylenediphenyl diisocyanate.							
New York	The following components are listed: 4,4'-Methylenediphenyl diisocyanate.							
New Jersey	The following components are listed: 4,4'-Methylenediphenyl diisocyanate; o-(p-Isocyanatobenzyl)phenyl isocyanate.							
Pennsylvania	The following comp	onents are listed: 4,4	-Methylenediphenyl c	liisocyanate.				
CALIFORNIA PROP. 65								
No products were found.								
CANADA								
CANADIAN LISTS								
Canadian NPRI	The following components are listed: 4,4'-Methylenediphenyl diisocyanate.							
CEPA Toxic Substances	None of the ingredients are listed.							
Canada Inventory	All components are	listed or exempted.						

INTERNATIONAL LISTS / NATIONAL INVENTORY		
Australia	Not determined.	
China	Not determined.	
Europe	Not determined.	
Japan	Not determined.	
Malaysia	Not determined.	
New Zealand	Not determined.	
Philippines	Not determined.	
Republic of Korea	Not determined.	
Taiwan	Not determined.	

SECTION 16: OTHER INFORMATION				
Prepared By	Huntsman Building Solutions – Technical Department			
Preparation Date (Y/M/D)	2016-2-18			
Current Issue Date (Y/M/D)	2022-01-24			
ABBREVIATIONS KEY				
ATE	Acute Toxicity Estimate			
BCF	Bioconcentration Factor			
GHS	Globally Harmonized System of Classification and Labelling of Chemicals			
IATA	International Air Transport Association			
IBC	Intermediate Bulk Container			
IMDG	International Maritime Dangerous Goods			
LogPow	Logarithm of the octanol/water partition coefficient			
MARPOL 73/78	International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = maritime pollution)			
UN	United Nations			

Notice to Reader: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

