

U-251A

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@huntsmanbuilds.com / Website: www.huntsmanbuildingsolutions.com	GHS Product Identifier: Maxguard U-251A Chemical Name: Prepolymer based on diisocyanate Product Type: Liquid Identified Use: Component A of a Polyurea Spray System
Emergency Telephone in USA: CHEMTREC 800-424-9300. In Canada: CANUTEC 613-996-6666 or *666 (cellular).	

SECTION 2: HAZARDS IDENTIFICATION

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 4 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 INCLUDING PRECAUTIONARY STATEMENTS

Hazard Pictograms	
Signal Word	DANGER
Hazard Statements	H332 – Harmful 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. P280 – Wear protective gloves. Wear eye or face protection. Wear protective clothing. P284 – Wear respiratory protection. P271 – Use only outdoors or in a well-ventilated area. P260 – Do not breathe the vapor. P264 – Wash hands thoroughly after handling. P272 (OSHA) – Contaminated work clothing must 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 + P341 (OSHA) + P312 – If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Call a poison center or physician if you feel unwell. P342 + P311 – If experiencing respiratory symptoms: Call a poison center or physician. P302 + P352 + P363 – If on skin: Wash with plenty of soap and water. 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.
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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.
Chemical Name	Prepolymer based on diisocyanate.

CAS NUMBER / OTHER IDENTIFIERS

CAS Number	Not applicable.
Product Code	Not available.

INGREDIENTS	CAS #	%
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, polymer with 1,1'-methylenebis [isocyanatobenzene], isocyanate-terminated	96328-90-4	≥15 – <30
1,2-Propanediol, polymer with 1-isocyanato-2-[(4-isocyanatophenyl) methyl]benzene, 1,1'-methylenebis[4-isocyanatobenzene], methyloxirane and oxirane	72088-97-2	≥15 – <30
Methylenediphenyl diisocyanate	26447-40-5	≥10 – <25
4,4'-Methylenediphenyl diisocyanate	101-68-8	≥10 – <25
Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer	25686-28-6	≥1 – <5

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	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. Get medical attention. If necessary, call a poison center or physician. 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.

MOST IMPORTANT SYMPTOMS / EFFECTS, ACUTE AND DELAYED

POTENTIAL ACUTE HEALTH EFFECTS

Eye Contact	Causes serious eye irritation.
Inhalation	Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Contact	Causes skin irritation. May cause an allergic skin reaction.
Ingestion	No known significant effects or critical hazards.

OVER-EXPOSURE SIGNS / SYMPTOMS	
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 present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
See toxicological information (Section 11)	

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable Extinguishing Media	None known.
Specific Hazards Arising from the Chemical	No specific fire or explosion hazard.
Hazardous Thermal Decomposition Products	Combustion products may include carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN.
Special Protective Actions for Fire Fighters	No special measures are required.
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. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator.
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 nonemergency 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 HANDLING

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.
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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.
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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.
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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

CONTROL PARAMETERS - CANADA

OCCUPATIONAL EXPOSURE LIMITS

Ingredient Name	List Name	TWA (8 HOURS)			STEL (15 MINS)			CEILING			notes
		ppm	mg/m ³	other	ppm	mg/m ³	other	ppm	mg/m ³	other	
4,4'-Methylenediphenyl diisocyanate	US ACGIH 3/2015	0.005	–	–	–	–	–	–	–	–	
	AB 4/2009	0.005	0.05	–	–	–	–	–	–	–	
	BC 2/2015	0.005	–	–	–	–	–	0.01	–	–	(1) (3)
	ON 7/2015	0.005	–	–	–	–	–	–	–	–	
	QC 1/2014	0.005	0.051	–	–	–	–	–	–	–	(3)
Methylenediphenyl diisocyanate	BC 2/2015	0.005	–	–	–	–	–	0.01	–	–	
	ON 7/2015	0.005	–	–	–	–	–	0.02	–	–	

(1) Absorbed through skin (3) Skin sensitization

Appropriate Engineering Controls	If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
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Environmental Exposure Controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
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INDIVIDUAL PROTECTION MEASURES

Hygiene Measures	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	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-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 and should be approved by a specialist before handling this product.
Other Skin Protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
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	Yellow
Odor	Slightly musty
Odor Threshold	Not available
pH	Not available
Melting Point	Not available
Boiling Point	Not available
Flash Point	Not available
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 – 1.14
Solubility	Insoluble. Reacts with water to release carbon dioxide.
Partition Coefficient: N-Octanol/Water	Not available
Auto-Ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity @ 77°F (25°C)	500 – 1000 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	The product is stable.
Possibility of Hazardous Reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to Avoid	Avoid exposure to moisture and high temperatures to protect product quality.
Incompatible Materials	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous Decomposition Products	Combustion products may include carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN.

SECTION 11: TOXICOLOGICAL INFORMATION

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
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4,4'-Methylenediphenyl diisocyanate	Eyes – Moderate irritant	Rabbit	–	100 mg	–	
SENSITIZATION						
There is no data available.						
MUTAGENICITY						
There is no data available.						
CARCINOGENICITY						
CLASSIFICATION						
Product/Ingredient	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
4,4'-Methylenediphenyl diisocyanate	–	3	–	–	–	–
REPRODUCTIVE TOXICITY						
There is no data available.						
TERATOGENICITY						
There is no data available.						
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)						
Product/Ingredient	Category	Route of Exposure		Target Organs		
Methylenediphenyl diisocyanate	Category 3	Not applicable		Respiratory tract irritation		
4,4'-Methylenediphenyl diisocyanate	Category 3	Not applicable		Respiratory tract irritation		
Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer	Category 3	Not applicable		Respiratory tract irritation		
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)						
Product/Ingredient	Category	Route of Exposure		Target Organs		
Methylenediphenyl diisocyanate	Category 2	Not determined		Not determined		
4,4'-Methylenediphenyl diisocyanate	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 ROUTES OF EXPOSURE						
Dermal contact. Eye contact. Inhalation. Ingestion.						
POTENTIAL ACUTE HEALTH EFFECTS						
Eye Contact	Causes serious eye irritation.					
Inhalation	Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.					
Skin Contact	Causes skin irritation. May cause an allergic skin reaction.					
Ingestion	No known significant effects or critical hazards.					
SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS						
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.					
DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT AND LONG TERM EXPOSURE						
SHORT TERM EXPOSURE						
Potential Immediate Effects	No known significant effects or critical hazards.					
Potential Delayed Effects	No known significant effects or critical hazards.					
LONG TERM EXPOSURE						
Potential Immediate Effects	No known significant effects or critical hazards.					

Potential Delayed Effects	No known significant effects or critical hazards.
POTENTIAL CHRONIC HEALTH EFFECTS	
General	May cause damage to organs through prolonged or repeated exposure if inhaled. 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 hazards.
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 hazards.

NUMERICAL MEASURES OF TOXICITY – ACUTE TOXICITY ESTIMATES	
There is no data available.	

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY			
Product / Ingredient Name	Result	Species	Exposure
4,4'-Methylenediphenyl diisocyanate	Acute IC50 1.5 mg/l	Algae	72 hours
PERSISTENCE AND DEGRADABILITY			
There is no data available.			
BIOACCUMULATIVE POTENTIAL			
Product / Ingredient Name	LogPow	BCF	Potential
Methylenediphenyl diisocyanate	4.51	200	Low
4,4'-Methylenediphenyl diisocyanate	4.51	200	Low
MOBILITY IN SOIL			
Soil/Water Partition Coefficient (Koc)	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.
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SECTION 14: TRANSPORTATION INFORMATION

DOT	
UN Number	Not regulated
UN Proper Shipping Name	–
Transport Hazard Class(es)	–
Packing Group	–
Environmental Hazard	No
Additional Information	–
TDG	
UN Number	Not regulated
UN Proper Shipping Name	–

Transport Hazard Class(es)	–
Packing Group	–
Environmental Hazard	No
Additional Information	–
IMDG	
UN Number	Not regulated
UN Proper Shipping Name	–
Transport Hazard Class(es)	–
Packing Group	–
Environmental Hazard	No
Additional Information	–

IATA	
UN Number	Not regulated
UN Proper Shipping Name	–
Transport Hazard Class(es)	–
Packing Group	–
Environmental Hazard	No
Additional Information	–
AERG: Not applicable	
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; Methylenediphenyl diisocyanate. TSCA 8(c) calls for record of SAR: 4,4'-Methylenediphenyl diisocyanate; Methylenediphenyl diisocyanate. 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 304 RQ	Not applicable
SARA 311/312	
CLASSIFICATION	
Immediate (acute) health hazard; Delayed (chronic) health hazard	
COMPOSITION / INFORMATION ON INGREDIENTS	

Product / Ingredient Name	%	Fire Hazard	Sudden Release of Pressure	Reactive	Immediate (acute) Health Hazard	Delayed (chronic) Health Hazard
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, polymer with 1,1'-methylenebis [isocyanatobenzene], isocyanate-terminated	≥15 - <30	No	No	No	Yes	No
Methylenediphenyl diisocyanate	≥10 - <25	No	No	No	Yes	Yes
4,4'-Methylenediphenyl diisocyanate	≥10 - <25	No	No	No	Yes	Yes
Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer	≥1 - <5	No	No	No	Yes	Yes

SARA 313

	Product / Ingredient Name	CAS #	%
Form R – Reporting Requirements	4,4'-Methylenediphenyl diisocyanate	101-68-8	≥10 - <25
Supplier Notification	4,4'-Methylenediphenyl diisocyanate	101-68-8	≥10 - <25

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

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; Methylenediphenyl diisocyanate.
Pennsylvania	The following components are listed: 4,4'-Methylenediphenyl diisocyanate.

CALIFORNIA PROP. 65

No products were found.

CANADA

CANADIAN LISTS

Canadian NPRI	The following components are listed: 4,4'-Methylenediphenyl diisocyanate.
CEPA Toxic Substances	No ingredients are listed.
Canada Inventory	All components are listed or exempted.

SECTION 16: OTHER INFORMATION

Prepared By	Huntsman Building Solutions – Technical Department
Preparation Date (Y/M/D)	2018-5-25
Current Issue Date (Y/M/D)	2022-01-20

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" = marine 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.