

Material Safety Data Sheet



Section 1: Product and Company Identification

Product Name: **AroStruct -Part A**

Sold By: **VersaFlex Incorporated**
686 S. Adams Street
Kansas City, KS 66105
913-321-9000

FOR CHEMICAL EMERGENCY Spill, leak, fire, exposure, or accident, call CHEMTREC day or night
Domestic North America **800.424.9300** International **703.527.3887**

Fax Phone: **913.321.1490**

TSCA Inventory: All components of this product are included, or are exempt from inclusion, in the EPA Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Canadian DSL: All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List (DSL).

Section 2: Composition/Information on Ingredients

<u>Hazardous Components</u>	<u>CAS#</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>% by Wgt</u>
Polymethylenepolyphenyl polyisocyanate	9016-87-9			30 – 50
Diphenylmethane diisocyanate	101-68-8			15 - 25

Section 3: Hazards Identification

Emergency Overview:

Routes of Entry:	<u>Route</u>	<u>Entry Risk</u>
	Inhalation	Possible
	Ingestion	Possible
	Skin Contact	Possible
	Eye Contact	Possible

Potential Health Effects: **Inhalation** May cause nausea and respiratory tract irritation. May cause respiratory sensitization in susceptible individuals.
Ingestion No significant signs or symptoms of any adverse health hazards.
Skin Contact Product is a slight skin irritant. May cause swelling and redness.
Eye Contact Mild eye irritant. Vapors slightly uncomfortable. Splashes irritating and painful.

Acute Health Hazards: No information is available on the acute health hazards of this product. Based upon data from testing of similar products, no significant effects are expected.

Chronic Health Hazards: If misted or at high concentrations, may cause pallor, nausea, anesthetic or narcotic effects.

Medical Conditions Generally Aggravated by Exposure: Skin and eye sensitization. Depending on individual skin sensitivity, chronic or prolonged exposure may result in irritation, blistering, burning and peeling of skin layers.

Carcinogenicity: OSHA: No data ACGIH: No data NTP: No data IARC: No data
Other:

Section 4: First Aid Measures

Eye Contact:	Immediately flush with plenty of water for at least 15 minutes. If redness, itching, or a burning sensation develops, seek medical attention.
Skin Contact:	Remove from skin immediately. Rinse with clean water for 20-30 minutes. Use soapy water if needed. If redness, itching, or a burning sensation develops, seek medical attention.
Ingestion:	Do NOT induce vomiting! Dilute with water and seek medical attention immediately.
Inhalation:	Move victim to fresh air immediately. Give oxygen and seek medical attention.

Section 5: Fire-Fighting Measures

Flammable Limits:	Not determined
Flash Point, (Method Used):	>200° Fahrenheit (Pensky Marten Closed)
Autoignition Temperature:	

NFPA Hazard Rating:	Health: 2	Hazard Scale	Protective Equipment
	Flammability: 1	0=LEAST	A=SAFETY GLASSES
	Reactivity: 1	1=SLIGHT	B=SAFETY GLASSES, GLOVES
	Other: B	2=MODERATE	C=SAFETY GLASSES, GLOVES AND APRON
		3=HIGH	D= SAFETY GLASSES, GLOVES , APRON and RESPIRATOR
		4=EXTREME	

HMIS Hazard Rating:	Health: 2
	Flammability: 1
	Reactivity: 1
	Protection: B

Extinguishing Media:	Foam/Carbon dioxide/Dry chemical/Water fog
Special Fire Fighting Procedures:	Remove all ignition sources. Wear self-contained breathing apparatus and complete personal protective equipment when entering confined areas where potential for exposure to vapors or products exist.
Unusual Fire and Explosion Hazards:	Closed containers may rupture due to build-up of pressure when exposed to extreme heat.
Hazardous Decomposition Products:	

Section 6: Accidental Release Measures

Accidental Release Measures:	Avoid contact with material. Persons not wearing appropriate protective equipment should be excluded until the spill is cleaned up. Stop spill at source, pump liquid into salvage container. Remaining liquid may be taken up on clay, diatomaceous earth, or other absorbent. Treat with 5-8% concentration of ammonium hydroxide or 5-10% sodium carbonate. Add 10 parts neutralizing solution/part isocyanate. Let stand 48 hours.
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Section 7: Handling and Storage

Handling & Storage Precautions:	Prevent all skin and eye contact. Avoid breathing vapors. Re-seal partially used containers. Wash with soap and water before eating or drinking. Protect from moisture contamination. Exothermic generation of carbon dioxide may cause dangerous pressure. Keep away from all ignitable sources as well as extreme heat. Do not expose to excessive moisture.
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Section 8: Exposure Control/Personal Protection

Ventilation:	Adequate ventilation required. Local exhaust may be required in some areas. Special exhausting generally not required. Mechanical exhaust usually adequate.
Respiratory Protection:	Respiratory masks should be worn at all times when adequate ventilation does not exist. A NIOSH/MSHA respirator is acceptable.
Eye Protection:	Chemical tight goggles; full face shield if splashing is possible.
Skin Protection:	Coveralls and impervious foot covering is recommended.
Other Protective Clothing or Equipment:	Use impervious gloves, neoprene or rubber.
Work/ Hygienic Practices:	Good air flow in working area. Eyewash station and safety shower should be available. Gloves and respiratory equipment should be worn at all times.

Section 9: Physical and Chemical Properties

Appearance:	Pale yellow to amber		
Odor:	Faint odor		
Physical State:	Liquid		
ph As Supplied:	No Data		
ph (Other):	No Data		
Boiling Point:	N/A		
Melting Point:	Not determined		
Freezing Point:	No Data		
Vapor Pressure (mmHg):	Not determined		
Vapor Density (Air=1):	Not determined		
Specific Gravity (Water=1):	1.15		
Evaporation Rate (Butyl Acetate=1):	Slower than		
Solubility in Water:	Negligible (<1%)		
Percent Solids by Weight:	100%		
Percent Volatile (grams/liter):	By Weight: 0%	By Volume: 0%	
Volatile Organic Compounds (VOC) (grams/liter):	With Water: 0%	Without Water: 0%	
Viscosity:	No Data		

Section 10: Stability and Reactivity

Stability:	Stable		
Conditions to Avoid (<i>Stability</i>):	Avoid excessive heat, open flame, sparks and strong oxidizing agents. Protect from atmospheric moisture. Replace outage with inert dry nitrogen.		
Incompatibility (<i>Materials to Avoid</i>):	Avoid water, acid, base (alkalis, ammonia), alcohols, metal compounds.		
Hazardous Decomposition or Byproducts:	Isocyanate vapors or mist, carbon dioxide, carbon monoxide, nitrogen oxides.		
Hazardous Polymerization:	Will not occur under normal circumstances.		
Conditions to Avoid (Polymerization):	Avoid incompatible reactants, especially strong bases, water or temperatures over 160° Centigrade.		

Section 11: Toxicological Information

Toxicological Information: No Data

Section 12: Ecological Information

Ecological Information: No Data

Section 13: Disposal Considerations

Waste Disposal Method:	Use excess product in an alternate beneficial application. Dispose of according to all local, state and federal regulations.
RCRA Hazard Class:	Non-Regulated

Section 14: Transport Information

U.S. Department of Transportation

Proper Shipping Name: Methylene diphenyl diisocyanate pre polymer

Hazard Class: Non-Regulated (in 55 gallon drums), NOI

ID Number:

Packing Group:

Label Statement:

Water Transportation

Proper Shipping Name: Methylene diphenyl diisocyanate pre polymer

Hazard Class: Non-Regulated, NOI

ID Number:

Packing Group:

Label Statement:

Air Transportation

Proper Shipping Name: Methylene diphenyl diisocyanate pre polymer

Hazard Class: Non-Regulated, NOI

ID Number:

Packing Group:

Label Statement:

Other Agencies:

Section 15: Regulatory Information

U.S. Federal Regulations

TSCA (Toxic Substance Control Act): Section 12(b) Export Notification. This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States: There are no TSCA 12(b) Chemicals in this product.

CERCLA (Comprehensive Response Compensation and Liability Act): CERCLA section 103(a) specifically requires the person in charge of a vessel or facility to report immediately to the National Response Center (NRC) a release of a hazardous substance whose amount equals or exceeds the assigned RQ. The following hazardous substances are contained in this product: Chemical Name- See Section 2

SARA Title III (Superfund Amendments and Reauthorization Act): This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

311/312 Hazard Categories: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard: See Section 3

313 Reportable Ingredients: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: Chemical Name- See Section 2

State Regulations:

California Proposition 65. The chemical(s) noted below and contained in this product are known to the state of California to cause cancer, birth defects or other reproductive harm. Unless otherwise specified in Section 2 of this MSDS, these chemicals are present at <0.1%: There are no proposition 65 chemicals known to exist in this product.

International Regulations:

Section 16: Other Information

Other Information:

Preparation Information:

Disclaimer:

To the best of our knowledge, the information contained in this MSDS is accurate. It is intended to assist the user in his evaluation of the product's hazards, and safety precautions to be taken in its use. The data in this MSDS relate only to the specific material designated herein. We do not assume liability for the use of, or reliance on this information, nor do we guarantee its accuracy or completeness.