Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Carlisle SPF-245 Insulation SAZ, S, W or M Part B

Draduct/Chamical Names Carlista SDE 245 Insulation Dart D

Date of Preparation: 1/30/09

MSDS No. 301179

Revision: 001

Product/Chemical Name: Carlisle SPF-245 Insulation Part B Chemical Formula: Mixture General Use: Insulation Manufacturer: Carlisle SynTec Incorporated, 1285 Ritner Highway, Carlisle, PA 17013, Phone: 800-479-6832 Emergency Phone Number: CHEMTREC (USA) 800-424-9300	
Section 2 - Hazards Identification	
ትትትት Emergency Overview ትትትትት	HMIS
Danger- Causes severe skin burns and eye damage Danger- Causes serious eye damage Warning- May cause an allergic skin reaction Warning- May cause respiratory irritation Warning- May cause damage to (tissue injury in the) upper respiratory tract and lungs through prolonged and repeated inhalation	H 1 F 1 R 1 PPE† †Sec. 8

Potential Health Effects

Primary Entry Routes: Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact.

Target Organs: Eye, skin, respiratory tract.

Acute Effects

Inhalation: Acute inhalation exposure of dimethylaminoethanol at high concentrations has been known to produce respiratory difficulties, loss or coordination and decreased motor activity in rates. At levels above the recommended exposure limit, the fluorocarbon acts as a weak narcotic. Acute overexposure causes tremors, confusion, irritation, suffocation, and may result in cardiac sensitization.

Eye: Dimethylaminoethanol is extremely irritating to the eyes. Direct contact with the liquid is corrosive. Polyol contact may result in irritation.

Skin: Dimethylaminoethanol is extremely irritating to the eyes. Direct contact with the liquid is corrosive. Burns and permanent injury may result. Polyol contact may result in irritation.

Ingestion: May cause gastrointestinal disturbances. Ingestion of large amounts of glycerine may result in nausea, vomiting, gastric irritation and kidney disorders. Glycerine can exert systematic effects when given orally in very large doses.

Carcinogenicity: IARC, NTP, and OSHA do not list the product as a carcinogen.

Medical Conditions Aggravated by Long-Term Exposure:

Chronic Effects: Repeated skin contact with dimethylaminoethanol may result skin sensitization. Repeated inhalation has been known to produce effects on the eyes and nasal mucosa as well as respiratory and olfactory lesions in experimental animals. Exposure to dimethylaminoethanol has been associated with visual and ocular changes and is reversible upon significantly reduced or ceased exposure.

Section 3 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt <i>or</i>
		% vol
Polyol		40-70
Flame Retardant		7-13
Glycerine	56-81-5	0.5-1.5
2-Dimethylaminoethanol	108-01-0	1-5
Surfactant		0.5-1.5
Catalyst		0.5-1.5
1,1,1,3,3-pentafluoropropane	460-73-1	5-10

Trace Impurities:									
-	1,	PEL	4	H TLV	NIOSH REL		NIOSH		
Ingredient	TWA	STEL	TWA	STEL	TWA	STEL	IDLH		
Glycerol	15 mg/m ³ total dust 5 mg/m ³ respirable fraction	none estab.	10 mg/m ³ mist	20 mg/m ³	none estab.	none estab.	none estab.		
2-Dimethylaminoethanol	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.		
1,1,1,3,3-pentafluoropropane	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.		
	Section 4 - First Aid Measures								
 Inhalation: Remove the affee as needed. Immediate media Eye Contact: Immediately file ensure that eyelids are separa Skin Contact: Immediately file clothing before reuse. If irr Ingestion: Rinse mouth and victim is unconscious or have After first aid, get appropriate 	ical attention r lush eyes with rated and that remove contar itation persists then drink plea ving convulsion	equired. water for at le the eye is being ninated clothin s seek medical nty of water. I ons. Immediate	ast 15 minutes g irrigated. Ge g and shoes ar attention imme nduce vomitin e medical atten	. Use lukewar et medical atter nd wash skin w ediately g. Never indu- tion required.	m water if position.	sible. Use fing vater. Wash co	gers to ntaminated		
	See	ction 5 - F	'ire-Fighti	ng Measu	res				
Flash Point Method: Open (Autoignition Temperature: Flammability Classification Extinguishing Media: Wate Unusual Fire or Explosion 1 Hazardous Combustion Pro Fire-Fighting Instructions: Fire-Fighting Equipment: H apparatus (SCBA) with a fu	No data avail a: Class III B (r, dry extingui Hazards: Nor oducts: Carbo Do not release Because fire m	Combustible L shing media, c he known. n monoxide, c e runoff from f hay produce tox	arbon dioxide, arbon dioxide. ire control met kic thermal dec	hods to sewers composition pr	oducts, wear a		breathing		
	Section	on 6 - Acci	idental Re	elease Mea	sures				
Spill /Leak Procedures: Ren system or soil. Small Spills: Absorb materia Large Spills Containment: For large spi Cleanup: Large quantities r other absorbent, shoveled i Regulatory Requirements:	al with sawdus ills, dike far ah nay be pumpe into suitable co Follow applic	t or other abso head of liquid s d into containe ontainer for dis cable OSHA re	rbent, shovel i spill for later di er suitable for o sposal. egulations (29	nto suitable co sposal. Do not lisposal. Resid CFR 1910.120	ntainer for disp release into se due should be a	posal. ewers or watery	ways.		
	Se	ection 7 - 1	Handling	and Stora	ge				
 Handling Precautions: Avo handling. Storage Requirements: Stor against moisture. Store in u viscosity, requiring the mate contact with a heat source) of Avoid extreme heat. Store point of the store of the sto	id contact with re in dry, well- mopened origi erial to be rest can be used to	h skin and eyes ventilated area nal containers ored to room to warm the drur	s. Wear approp a between 70-8 in a cool, dry p emperature pri- ns. Protect fro	priate eye and 0°F (21-27°C) place. Low ter or to use. Indi- om direct sunlig	skin protection , in tightly clos nperature expo rect heat (do no ght. Keep in a	sed containers. osure does incre ot use flames o	Protect ease liquid r direct		
S	ection 8 -	Exposure	Controls	/ Personal	Protectio	n			
Engineering Controls: Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.									

Administrative Controls:

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Use NIOSH or MSHA approved

<u>respirator for organic vapors with a pre-filter or a supplied airline respirator (SAR).</u> *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment:

Hand Protection: Permeation resistant gloves (that meet ANSI/ISEA 105-2005) required when handling the material directly or during its application. Butyl rubber, neoprene and PVC are also effective gloves.

Eye Protection: Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are NOT eye protective devices. Vapor resistant goggles should be worn when contact lenses are in use. In a splash hazard environment, chemical goggles should be used in combination with a full face-shield.

Skin and Body Protection: Industrial shoes to protect feet from contact with product. Long sleeves, long trousers to protect skin from contact with product. Protective skin creams or emollients useful.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Physical State: Liquid Appearance and Odor: Dark brown and musty Density: 10.2 lbs/gallon Flash Point: 400°F (204°C) Flash Point Method: Open Cup Autoignition Temperature: No data available Water Solubility: slightly soluble Viscosity: 1250 cps Specific Gravity (H₂O=1, at 4 °C/39°F): 1.22

Section 10 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions. **Possibility of hazardous reaction:** Hazardous polymerization can occur in the presence of isocyanates.

Chemical Incompatibilities: Avoid contact with isocyanates. Product will foam in highly exothermic reaction.

Conditions to Avoid: Exposure to temperatures in excess of 80°F (27°C). Avoid moisture, direct sunlight and excessive temperatures.

Hazardous Decomposition Products: Thermal oxidative decomposition of material can produce carbon monoxide and carbon dioxide.

Section 11- Toxicological Information

Toxicity Data: No Information Available

Eye Effects: Minor irritation and reddening

Skin Effects: Irritation

Acute Inhalation Effects: Minor Irritation Acute Oral Effects: Not Established Chronic Effects: Not Established Carcinogenicity: Not Established

Section 12 - Ecological Information

Ecotoxicity: Not Determined Environmental Fate: Not Determined Environmental Degradation: Not Determined Soil Absorption/Mobility: Not Determined

Section 13 - Disposal Considerations

Disposal:

Disposal Regulatory Requirements: Waste must be disposed of in accordance with Federal, State, Provincial and local environmental control regulations. Incineration is the preferred method. Empty containers must be handled with care due to product residue. Do not discharge substance/product into sewer system.

MSDS No. 301179Carlisle SPF-245 Insulation SAZ, S, W or M Part B01/3Container Cleaning and Disposal: Decontaminate containers prior to disposal. Empty decontaminated containers should be crushed to prevent reuse. Do not heat or cut empty containers with electric or gas torch. Gases may be highly toxic.

formation CFR 172.101): Quantity Limitations a) Passenger, Aircraft, or Ra b) Cargo Aircraft Only: N/A Vessel Stowage Requiremen a) Vessel Stowage: N/A								
Quantity Limitations a) Passenger, Aircraft, or Ra b) Cargo Aircraft Only: N/A Vessel Stowage Requiremen								
a) Passenger, Aircraft, or Ra b) Cargo Aircraft Only: N/A Vessel Stowage Requiremen								
b) Other: N/A	ts							
Special Provisions (172.102): N/A b) Other: N/A Section 15 - Regulatory Information								
EPA Regulations:								
A Flag: P								
lifornia to cause cancer, birth defec	ts or other							
Code								
2,4								
Codes Hazards	Carcinogen							
A	False							
<u>Code</u> Basic Hazard Basic Hazard								
	nventory List. A Flag: P RA, Sec. 3001; CWA, Sec. 311 (b)(Threshold Planning Quantity (TPQ lifornia to cause cancer, birth defec $\frac{Code}{2, 4} = \frac{Codes}{4} = \frac{Hazards}{}$							

Section 16 - Other Information

Prepared By: Research and Development **Revision Notes:** General revision- Formatting changes

Additional Hazard Rating Systems:

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