Tel (815) 741-6800 Fax (815) 741-6822 For Emergency: Chemtrec (800) 424-9300

MATERIAL SAFETY DATA SHEET					
1	PRODUCT	CT FROTH-PAK 110, 180, 600/Utili-Foam (A Component) 1.75 Density			
2	COMPOSITION				
	CHEMICAL 4,4' - Diphenylmethane diisocyanate (MDI)	<u>CAS#</u> 101-68-8	<u>CONCENTRATION</u> 40-70%	<u>REGULATED_</u> Yes	
	Polymeric MDI	9016-87-9	40-70%	Yes	
	Chlorodifluoromethane (HCFC 22)	75-45-6	7-13%	Yes	
	(1-see regulatory section for more information) (2-different raw material sources) Appearance: Dark brown, frothy liquid with a mild odor.				
3	HAZARDS IDENTIFICATION				
	HMIS: H F R PPE 2 1 0		CAUTION! Contents under press Irritating to eyes, skin and resp May cause sensitization by skin Exposure to individuals with astl allergies may aggravate existing	iratory tract. contact and inhalation. hma, eczema and or	
		Routes of Entry:	may include: coughing, wheezing Eye and skin contact, inhalation	g and shortness of breath.	
4	FIRST AID MEASURES		j		
		INHALATION remove to fresh	othing; wash skin with soap and v air. e ingestion, give large amount of		
5	FIRE-FIGHTING MEASURES				
	Haz	Extinguishing Media: Special Protective Equipment: ardous Decomposition Products:	>390°F (>199°C) (estimated) Carbon Dioxide, Dry Chemical, F Self Contained Breathing Appara During combustion, Carbon Mon Carbon Dioxide, Nitrogen Oxides and trace amounts of Hydrogen given off.	atus oxide and s, Ammonia	
6	ACCIDENTAL RELEASE MEASU	IRES	-		
			Provide adequate ventilation. Wear suitable personal protectiv Contain spill and collect using su material such as sawdust or ver container adding decontaminate 7% ammonia and 3% detergent 24 hours prior to disposal.	uitable absorbent miculite. Shovel into waste e solution. (90% water,	
7	HANDLING AND STORAGE		CAUTIONI Contonto undor sara	Suro	
			CAUTION! Contents under press Avoid open flames. Storage temperature: <120°F (Do not puncture or incinerate.		
	Prepared by: M. Herosy		Reference No. FP 110, 180, 60	00/Utili-Foam (A Comp)	
	File Name: CON-127A		Date of Issue: 12/97	(pg. 1 of 2)	

MATERIAL SAFETY DATA SHEET

		MATERIAL SAFETY DATA SH	0 0	: Chemtrec (800	7,7277300	
1	PRODUCT	FROTH-PAK 110, 180, 600/L 1.75 Density	Itili-Foam (B Co	mponent)		
2	COMPOSITION					
	CHEMICAL Polyol Blend Flame Retardant Catalyst Silicone Surfactant Chlorodifluormethane (HCFC 22)	<u>CAS#</u> Mixture_ Mixture_ Mixture_ N/A 75-45-6	CONCENTRATIO 40-70% 15-40% 1-5% 1-5% 10-30%	<u>DN</u>	<u>REGULATED</u> No No No Yes	
3	HAZARDS IDENTIFICATION Irritancy of Product	yellow, frothy liquid with a mild : Irritating to eye, skin and muc	ous membranes		HMIS: H F R PPE 1 1 0	
4	Routes of Entry: FIRST AID MEASURES	: Eye and skin contact, inhalatic	on, ingestion.			
		EYE flush with clean, low pre-	ssure water for	15 minutes while h	olding eyelids op	en.
		SKIN remove contaminated cl	othing; wash ski	in with soap and w	ater.	
		INHALATION remove to fresh air.				
		INGESTION in case of excessiv induce vomiting. In all cases, seek additional me	0 0	e large amount of	liquids. Do not	
5	FIRE-FIGHTING MEASURES		200° F (, 02 (
	Haza	Extinguishing Media: Extinguishing Media: Special Protective Equipment: rdous Decomposition Products:	Carbon Dioxide Self Contained During combus Carbon Dioxide	Breathing Apparat	us xide and Ammonia and	
6	ACCIDENTAL RELEASE MEASU	JRES				
			equipment. Co	te ventilation. bersonal protective ntain spill and colle bent material such	ect using a	
7	HANDLING AND STORAGE		Kana C			
			Protect contair Avoid direct su	n sparks, flames an ners from physical nlight. rature: 75°F (26°C	abuse.	ι.
8	EXPOSURE CONTROLS/PERSO	NAL PROTECTION	EYE wear safet SKIN wear prot RESPIRATORY u	y goggles.	itilated areas.	ory
	Prepared by: M. Herosy			FP 110, 180, 600	D/Utili-Foam (B	Comp)
	File Name: CON-127B		Date of Issue:	5/97		(pg. 1 of 2)

Flexible Products 2050 North Broadway Joliet, Illinois 60435

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For Emergency: Chemtrec (800) 424-9300

MATERIAL SAFETY DATA SHEET

9	PHYSICAL AND CHEMICAL PR	HYSICAL AND CHEMICAL PROPERTIES		
			Vapor Pres. (21°C/70°F): 2500 mmHg	
			Specific Gravity: 1.2	
			VOC Content (lb/gal): 0	
10	STABILITY AND REACTIVITY			
			Stable under normal handling and use.	
11	TOXICOLOGICAL INFORMATION			
			No toxicological testing has been done on this mixture.	
12	ECOLOGICAL INFORMATION			
			Unknown	
13	DISPOSAL INFORMATION			
			Do not puncture or incinerate.	
			Relieve all pressure prior to disposal.	
			Empty cylinders, once relieved of all pressure, can be	
			disposed of as non-hazardous waste.	
			Dispose of left over chemical by following instructions	
			under "Accidental Release Measures."	
14	TRANSPORTATION INFORMATION			
		Compressed gases	s, N.O.S. (Nitrogen, Chlorodifluoromethane), 2.2 UN 1956	
15	REGULATORY INFORMATION			
15				
	EXPOSURE LIMITS	TWA (8 hour), mg/m_	<u>SHORT TERM(10 mins), mg/m_</u>	
	Chlorodifluoromethane	3500 (1000 ppm)	N/A	
			1	
	REGULATED CHEMICAL APPLICABLE REGULATIONS01			
	Chlorodifluoromethane	SARA 311/312/313, Canada	a, IVIA, INJ, PA	
1				
1				
16	OTHER INFORMATION			
		NA		
	Prepared by: M. Herosy		Reference No. FP 110, 180, 600/Utili-Foam (B Comp)	
	File Name: CON-127B		Date of Issue: 5/97 (pg. 2 of 2)	

MATERIAL SAFETY DATA SHEET

0	EVENSUE CONTROLS (DEDCON		
8	EXPOSURE CONTROLS/PERSON	AL PROTECTION	EYE wear safety goggles.
			SKIN wear protective clothing.
			RESPIRATORY use only in well-ventilated areas.
			With insufficient ventilation, or in situations where the
			potential exists for exceeding the TLV, wear Self Contained
			Breathing Apparatus.
9	PHYSICAL AND CHEMICAL PROP	PERTIES	
			Vapor Pres. (21°C/70°F): 2700 mmHg
			Specific Gravity: 1.3
			VOC Content (lb/gal): 0
10	STABILITY AND REACTIVITY		
			Reacts with water. Avoid alkalies, acids, alcohol and
			ammonia. Reaction may be violent at elevated
			temperatures.
11	TOXICOLOGICAL INFORMATION		
			Concentrations of components (Sec. 2) must be
			considered to determine effects of this mixture.
			MDI: LD50 15gm/kg (rat); ingestion
			CAUTION! Contents under pressu sure.
		Irritancy of Product:	Irritating to eyes, skin and respiratory tract.
		5	May cause sensitization by skin contact and inhalation.
			Exposure to individuals with asthma, eczema and or
		(reate and on one)	allergies may aggravate existing conditions. Symptoms
			may include: coughing, wheezing and shortness of breath.
		Doutos of Entry	Eye and skin contact, inhalation, ingestion.
10	ECOLOGICAL INFORMATION	Routes of Entry.	Eye and skill contact, initialation, ingestion.
12	ECOLOGICAL INFORMATION		Unknown
			UTKTOWT
13	DISPOSAL INFORMATION		
13			Do not puncture or incinerate.
			Relieve all pressure prior to disposal.
			Empty cylinders, once relieved of all pressure, can be
			disposed of as non-hazardous waste.
			Dispose of left over chemical by following instructions
14	TRANSPORTATION INFORMATIO		under "Accidental Release Measures."
14	TRANSPORTATION INFORMATIC		N.O.S. (Nitrogen, Chlorodifluoromethane), 2.2 UN 1956
		compressed gases,	N.O.S. (Nitrogen, Chlorodindoromethane), 2.2 UN 1956
15	REGULATORY INFORMATION		
15	EXPOSURE LIMITS	<u>TWA (8 hour), mg/m_</u>	SHORT TERM(10 mins), mg/m_
		0.05 (0.005ppm)	0.2 (0.02ppm) ceiling
1	diisocyanate (MDI)	0.00 (0.000ppm)	o.z (o.ozppni) cenny
	unsocyanate (MDI)		
1	Chlorodifluoromethane	3500 (1000 ppm)	N/A
	Chioroumuoromethane	3300 (1000 ppm)	
1			
		APPLICABLE REGULATIONS	
	REGULATED CHEMICAL APPLICABLE REGULATIONS 4,4'-Diphenylmethane- SARA 311/312/313, CAA 1990 Toxic Air Pollutant		20 Toyic Air Pollutant
	diisocyanate (MDI)	5, IA 511/512/513, CAA 19	
	PMDI	SARA 313	
	Chlorodifluoromethane	SARA 311/312/313, Canada,	IVIA, INJ, FA
16			
16	OTHER INFORMATION		
	Prepared by: M. Herosy		Reference No. FP 110, 180, 600/Utili-Foam (A Comp)
1			
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