

MATERIAL SAFETY DATA SHEET

1	<b>PRODUCT</b> FROTH-PAK 110,180, 600 (A Component) MSHA, 25FS, 1.75 Density																
2	<b>COMPOSITION</b>  <table border="1" data-bbox="203 430 1331 577"> <thead> <tr> <th><u>CHEMICAL</u></th> <th><u>CAS#</u></th> <th><u>CONCENTRATION</u></th> <th><u>REGULATED</u></th> </tr> </thead> <tbody> <tr> <td>4,4-Diphenylmethane-diisocyanate (MDI)</td> <td>101-68-8</td> <td>40-70%</td> <td>Yes</td> </tr> <tr> <td>Polymeric MDI</td> <td>9016-87-9</td> <td>40-70%</td> <td>Yes</td> </tr> <tr> <td>Chlorodifluoromethane</td> <td>75-45-6</td> <td>7-13%</td> <td>Yes</td> </tr> </tbody> </table> <p>(1-see regulatory section for more information)          (2-different raw material sources)  <b>Appearance:</b> Dark brown, frothy liquid with a mild odor.</p>	<u>CHEMICAL</u>	<u>CAS#</u>	<u>CONCENTRATION</u>	<u>REGULATED</u>	4,4-Diphenylmethane-diisocyanate (MDI)	101-68-8	40-70%	Yes	Polymeric MDI	9016-87-9	40-70%	Yes	Chlorodifluoromethane	75-45-6	7-13%	Yes
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3	<b>HAZARDS IDENTIFICATION</b>  <div data-bbox="203 898 522 955" style="border: 1px solid black; padding: 5px; width: fit-content;">           HMIS: H F R PPE                  2 1 0         </div> <p style="text-align: right;"><b>CAUTION!</b> Contents under pressure.</p> <p><b>Irritancy of Product:</b> Irritating to eyes, skin, and respiratory tract. May cause Sensitizing Properties: sensitization by skin contact and inhalation. Exposure to individuals with asthma, eczema and or allergies may aggravate existing conditions. Symptoms may include: coughing, wheezing and shortness of breath.</p> <p style="text-align: right;"><b>Routes of Entry:</b> Eye and skin contact, inhalation, ingestion.</p>																
4	<b>FIRST AID MEASURES</b>  <p><b>EYE</b> flush with clean, low pressure water for 15 minutes while holding eyelids open.</p> <p><b>SKIN</b> remove contaminated clothing; wash skin with soap and water.</p> <p><b>INHALATION</b> remove to fresh air.</p> <p><b>INGESTION</b> in case of excessive ingestion, give large amount of liquids. Do not induce vomiting.</p>																
5	<b>FIRE-FIGHTING MEASURES</b>  <p style="text-align: center;"><b>Flash Point:</b> &gt;390°F (&gt;199°C) (estimated)</p> <p style="text-align: center;"><b>Extinguishing Media:</b> Carbon Dioxide, Dry Chemical, Foam, Water</p> <p style="text-align: center;"><b>Special Protective Equipment:</b> Self Contained Breathing Apparatus</p> <p style="text-align: center;"><b>Hazardous Decomposition Products:</b> During combustion, Carbon Monoxide and Carbon Dioxide, Nitrogen Oxides, Ammonia and trace amounts of Hydrogen Cyanide are given off.</p>																
6	<b>ACCIDENTAL RELEASE MEASURES</b>  <p>Provide adequate ventilation.</p> <p>Wear suitable personal protective clothing and equipment.</p> <p>Contain spill and collect using suitable absorbent material such as sawdust or vermiculite. Shovel into waste container adding decontaminate solution. (90% water, 7% ammonia and 3% detergent) Leave uncovered for 24 hours prior to disposal.</p>																
7	<b>HANDLING AND STORAGE</b>  <p><b>CAUTION!</b> Contents under pressure.</p> <p>Avoid open flames.</p> <p><b>Storage temperature:</b> &lt;120°F (&lt;49°C)</p> <p>Do not puncture or incinerate.</p>																
Prepared by: M. Herosy File Name: CON-117A	Reference No. FP 110,180, 600 MSHA (A Component) Date of Issue: 12/97 <span style="float: right;">(pg. 1 of 2)</span>																

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5	<p>FIRE-FIGHTING MEASURES</p> <p>Flash Point: &gt;200°F (&gt;93.3°C) (estimated)          Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water          Special Protective Equipment: Self Contained Breathing Apparatus          Hazardous Decomposition Products: During combustion, Carbon Dioxide and Carbon Monoxide, Nitrogen Oxides, Ammonia and trace amounts of Hydrogen Cyanide are given off.</p>																				
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7	<p>HANDLING AND STORAGE</p> <p>CAUTION! Contents under pressure.          Avoid open flames.          Do not puncture or incinerate.          Storage temperature: 75°F (26°C)</p>																				
8	<p>EXPOSURE CONTROLS/PERSONAL PROTECTION</p> <p>EYE wear safety goggles.          SKIN wear protective clothing.          RESPIRATORY use only in well-ventilated areas.          With insufficient ventilation, wear suitable respiratory protection.</p>																				
<p>Prepared by: M. Herosy          File Name: CON-117B</p>	<p>Reference No. FP 110, 180, 600 MSHA (B Component)          Date of Issue: 5/97 (pg. 1 of 2)</p>																				

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9	PHYSICAL AND CHEMICAL PROPERTIES		Vapor Pres. (21°C/70°F): 2500mmHg
			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 as non-hazardous waste. Dispose of leftover chemical by following instructions under "Accidental Release Measures".
14	TRANSPORTATION INFORMATION		Compressed Gases, N.O.S. (Nitrogen, Tetrafluoroethane), 2.2 UN1956
15	REGULATORY INFORMATION		
<u>EXPOSURE LIMITS</u>		<u>TWA (8 hour), mg/m<sub>3</sub></u>	<u>SHORT TERM(10 mins), mg/m<sub>3</sub></u>
N/A			
<u>REGULATED CHEMICAL</u>		<u>APPLICABLE REGULATIONS</u>	
Dichlorofluoroethane		SARA 311/312/313	
16	OTHER INFORMATION		N/A
Prepared by: M. Herosy		Reference No. FP 110, 180, 600 MSHA (B Component)	
File Name: CON-117B		Date of Issue: 5/97	(pg. 2 of 2)

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8	EXPOSURE CONTROLS/PERSONAL PROTECTION	<p>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.</p>																					
9	PHYSICAL AND CHEMICAL PROPERTIES	<p>Vapor Pres. (21°C/70°F): 2700mmHg          Specific Gravity: 1.3          VOC Content (lb/gal): 0</p>																					
10	STABILITY AND REACTIVITY	<p>Reacts with water. Avoid alkalies, acids, alcohol and ammonia. Reaction may be violent at elevated temperatures.</p>																					
11	TOXICOLOGICAL INFORMATION	<p>Concentrations of components (Sec. 2) must be considered to determine effects of this mixture.          MDI: LD<sub>50</sub> 15gm/kg (rat); ingestion          CAUTION! Contents under pressure.          Irritancy of Product: Irritating to eyes, skin and respiratory tract.          Sensitizing Properties: May cause sensitization by skin contact and inhalation.          (Acute and Chronic) Exposure to individuals with asthma, eczema and or allergies may aggravate existing conditions. Symptoms may include: coughing, wheezing and shortness of breath.          Routes of Entry: Eye and skin contact, inhalation, ingestion.</p>																					
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