



## SPRAY APPLIED MEMBRANE SYSTEM

FAST FACTS	PHYSICAL PROPERTIES																																						
<ul style="list-style-type: none"> <li>The Spray Applied Membrane System is a specially manufactured two component system.</li> <li>Both components are environmentally friendly, waterborne, non-flammable liquid emulsions that present no storage or transportation hazards.</li> <li>The specific properties can be customized for different applications (hardness, curing times, trowel applied, etc.).</li> <li>These products have widespread applications in a number of diverse market segments including roofing, waterproofing, corrosion prevention and environmental control.</li> <li>Can be applied over geotextile fabrics.</li> </ul> <p><u>Advantages</u></p> <ul style="list-style-type: none"> <li>Rapid development of physical properties with ambient cure. No post cure required.</li> <li>High elongation and recovery</li> <li>100% Solvent-Free, Zero V.O.C.</li> <li>Low temperature cure down to 35°F (2°C).</li> <li>Fully trained application specialists</li> <li>Full contract support services, if required</li> <li>ABS Approval for Potable Water Service</li> </ul>	<table> <tr> <td></td> <td><u>Part A</u></td> <td>-</td> <td><u>Part B</u></td> </tr> <tr> <td>Color</td> <td>Dark tan</td> <td>-</td> <td>Clear liquid</td> </tr> <tr> <td>Working Life – 68°F (20°C)</td> <td>15seconds</td> <td>-</td> <td>15seconds</td> </tr> <tr> <td>Cure Times – 68°F (20°C)</td> <td>15minutes</td> <td>-</td> <td>15minutes</td> </tr> <tr> <td>% Volatile (VOL)</td> <td>0</td> <td>-</td> <td>0</td> </tr> <tr> <td>Viscosity</td> <td>50cp@75F-</td> <td></td> <td>5 cp@75F</td> </tr> <tr> <td>Mix Ratio</td> <td colspan="3">Pre-measured</td> </tr> <tr> <td>Flash Point</td> <td colspan="3">N/A</td> </tr> <tr> <td>Storage Life</td> <td colspan="3">Twelve months when stored in original sealed containers, between 50-90°F (10-25°C)</td> </tr> </table>				<u>Part A</u>	-	<u>Part B</u>	Color	Dark tan	-	Clear liquid	Working Life – 68°F (20°C)	15seconds	-	15seconds	Cure Times – 68°F (20°C)	15minutes	-	15minutes	% Volatile (VOL)	0	-	0	Viscosity	50cp@75F-		5 cp@75F	Mix Ratio	Pre-measured			Flash Point	N/A			Storage Life	Twelve months when stored in original sealed containers, between 50-90°F (10-25°C)		
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<p><b>Spray Applied Membrane System</b></p> <p>The membrane system is a performance driven product that provides a chemical and corrosion resistant membrane barrier for the restoration and protection of pipe, tanks and various structures. The Membrane System is backed by our engineering staff that services each application with assessment and technical support. The Membrane System offers a low cost, long term solution to some of the most challenging demands of the industry.</p>	<table border="1"> <thead> <tr> <th>Unsupported membrane</th> <th><u>Bidirectional</u></th> <th><u>Unidirectional</u></th> </tr> </thead> <tbody> <tr> <td>Tensile Strength (psi)</td> <td>Max.stroke reached</td> <td>ASTM D412</td> </tr> <tr> <td>Elongation</td> <td>1750%</td> <td>ASTM D412</td> </tr> <tr> <td>Recovery</td> <td>95%</td> <td>ASTM D412</td> </tr> <tr> <td>Vapor Transmission</td> <td>0.08 grains/ hr/ SF</td> <td>ASTM E96</td> </tr> <tr> <td>Peel Strength</td> <td>Did not peel</td> <td>ASTM D903</td> </tr> <tr> <td>Puncture Resistance</td> <td>No puncture at 12” deflection</td> <td>ASTM E154</td> </tr> <tr> <td>Cathodic Disbondment</td> <td>No disbondment</td> <td>ASTM G8</td> </tr> <tr> <td>Operating Temperature (°F)</td> <td>Up to 175°F</td> <td>ASTM D240</td> </tr> <tr> <td>Accelerated Aging*</td> <td>&gt;57 years</td> <td>ASTM D573</td> </tr> </tbody> </table> <p>*Period equivalent to &gt;57 years exposure to outdoor ambient environment.</p>			Unsupported membrane	<u>Bidirectional</u>	<u>Unidirectional</u>	Tensile Strength (psi)	Max.stroke reached	ASTM D412	Elongation	1750%	ASTM D412	Recovery	95%	ASTM D412	Vapor Transmission	0.08 grains/ hr/ SF	ASTM E96	Peel Strength	Did not peel	ASTM D903	Puncture Resistance	No puncture at 12” deflection	ASTM E154	Cathodic Disbondment	No disbondment	ASTM G8	Operating Temperature (°F)	Up to 175°F	ASTM D240	Accelerated Aging*	>57 years	ASTM D573						
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PERFORMANCE DATA		APPLICATION INSTRUCTIONS													
<b>CHEMICAL RESISTANCE</b> ASTM D543		<ul style="list-style-type: none"> <li>• Prepare substrate</li> <li>• Mask any areas not intended for membrane application</li> <li>• Install chamfer strips at 90° intersections</li> <li>• Apply reinforcing fabric and trowel grade membrane product as needed over cracks &amp; holes &gt; 0.25".</li> <li>• Stir "B" component to ensure proper mixing.</li> <li>• Begin application from low points to high to avoid contact with liberated water.</li> <li>• Build appropriate thickness: up to 0.500" per pass.</li> <li>• Allow system to completely cure (24 hrs before return to service in contact areas).</li> <li>• If color is desired, apply a suitable flexible coating over cured product.</li> </ul>													
Water	Satisfactory														
Sodium Hydroxide 40%	Satisfactory														
Ammonia, gaseous & aqueous	Satisfactory														
Sodium Hypochlorite (bleach)	Satisfactory														
Ferric Chloride sat. sol.	Satisfactory														
Sulfuric Acid 50%	Satisfactory														
Hydrochloric Acid 35%	Satisfactory														
Zinc Bromide 26%	Satisfactory														
Hydrogen Sulfide, gas 100%	Satisfactory														
Detergent Solution	Satisfactory														
<b>SALT FOG</b> ASTM B177-90															
1000 hour	No Effect														
<b>HYDROSTATIC HEAD</b> Grace Hydrostatic Head Procedure															
150 FT	No leakage														
<b>ABS APPROVAL</b> – Certificate # 05-HS113336A/3-PDA															
<b>SOUND REDUCTION</b> ASTM E1007															
98%	@ 205 mils														
PERSONAL PROTECTION		NOTE													
<p><b>INHALATION:</b> Wear suitable respiratory cartridge mask in enclosed spaces. Work in well ventilated areas.</p> <p><b>EYES:</b> Wear suitable goggles.</p> <p><b>SKIN:</b> Wear protective clothing and gloves made of impervious material.</p> <p><b>STORAGE:</b> Store away from direct sunlight and sources of heat. Store at 40° to 90°F (4° to 32°C). Avoid Freezing.</p>		<p>The Spray Applied Membrane System is not intended for applications with prolonged exposure to strong acids, organic acids, light hydrocarbons, strong solvents or high temperatures (&gt;200°F). To be applied by certified personnel only. Contact EMS for product compatibility. See MSDS for additional safety information.</p>													
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