



## EM9300 Exterior-Grade Polycarbonate Urethane

EM93100 Gloss, EM93200 Semi-Gloss, EM93300 Satin, EM93400 Flat

<b>Description</b>	Emtech® EM9300 Polycarbonate Urethane is a water-clear, non-yellowing coating that is engineered to provide exceptional adhesion to wood, non-ferrous metal, fiberglass, stone/cement and carbon fiber substrates. Formulated as a final topcoat for exterior structural woodwork, beams and window/door packages that require a hard yet flexible UV resistant coating.	
<b>Use</b>	For use on exterior or interior architectural and custom woodworking applications.	
<b>Features &amp; Benefits</b>	<p>HAP's FREE USEPA AIM National VOC Compliant OTC / MRPO Regional Compliant SCAQMD Regional Compliant LEED Credit Compliant Multi-Substrate Adhesion Performance 100% Burn-In Technology</p>	<p>Fast Dry-Time Stronger than Nitrocellulose Excellent Clarity Water Clean Up Non-Flammable Non-Yellowing/Water White</p>
<b>Directions for Use</b>	<p>All surfaces to be finished must be clean and free of oil, dust and contamination that may cause fisheyes or poor adhesion. Clean surface with denatured alcohol or fresh water. Allow surface to thoroughly dry before proceeding. Fine sand surface to be finished with the appropriate grade sandpaper based on the type of final finish required. Exterior substrates should be thoroughly cleaned to remove any milling contamination. Clean with a blend of water and alcohol mixed 1:1 before proceeding to a final sanding no higher than 320-grit. Spray-apply each coat of EM9300 with HVLP, Conventional or Air-assisted/airless spray equipment. Consult with your spray gun manufacturer for proper gun set-ups based on coating viscosity and intended use. Spray gun operators must wear a NIOSHA approved respirator during the spray application of this material. Consult the Material Safety Data Sheet of this material for safety and health procedures.</p>	
<b>Unfinished / New Wood</b>	<ol style="list-style-type: none"> <li>1. After surfaces has been prepared remove all dust with a lint-free cloth dampened with water/alcohol.</li> <li>2. Mix Emtech® EM9300 thoroughly before using. Strain as needed.</li> <li>3. EM9300 can be spray or brush applied without reducing with water or Emtech® SA5 Spray Retarder. However, additions of SA5 Retarder may be required to slow-down the system if the coating is drying too quickly during high temperature applications.</li> <li>4. Reduce EM9300 upwards to 50% with water if coating is to be used as a pre-stain sealer or tie-coat between stain or dye coats to prevent color bleed.</li> <li>5. Apply the required number of coats of EM9300 to obtain the desired film-build and final look. A minimum of 4 coats at 3mils wet per coat should be applied for exterior applications. Allow each coat to dry for a minimum of 1 hour before recoating. Do not apply coating to substrates where moisture content is above 10%. Sanding between each coat is not necessary unless contamination has affected the film formation, or if the last coat has dried for more than 24 hours. Sand with 320-grit sandpaper to remove surface imperfections, runs, sags and contamination. Remove sanding dust as specified and apply final coat as required.</li> </ol>	



**Physical Specifications**

Coating Density: 8.60 lbs./Gal.	Solids % by Weight: 30.0 – 34.0%nv (gloss format)
VOC Content Actual: 82 Grams/Liter	VOC Content Regulatory: 188 Grams/Liter
HAPS Content: 0.0	pH: 8.5 – 9.0
Viscosity: 35-40 Sec Zahns #2 Cup	Appearance: Off-white emulsion
Dry Time: 25- 35 minutes @ 3mils wet	Spread Rate: 400 sq ft. per Gallon @ 3mils wet
Flash Point: Above 200 °F	Shelf-Life: 24+ Months
Freeze/Thaw Cycles: 2+	Photochemical Reactivity: 0

**Average Equipment Use Settings**

<b>Conventional Equipment w/Pressure Pot:</b>	If needed, reduce with water up to 10% maximum. Nozzle size 0.055 inches (1.4 mm) to .062 inches (1.6mm) – atomizing air 40 psi (2.8.bar)–50 psi (3.5 bar), Pot pressure 4 psi (0.28 bar) to 10 psi (0.68 bar).
<b>HVLP Equipment w/Pressure Pot:</b>	If needed, reduce with deionized water up to 10% maximum. Nozzle size 0.055 inches (1.4mm) – 0.062 inches (1.6 mm) nozzle, atomizing air 4 psi (0.28 bar) -8 psi (0.55 bar).
<b>Air Assist- Airless Equipment:</b>	If needed, reduce with deionized water up to 5% maximum. Nozzle size , tip size.011 - .013 inches, fluid pressure 400 psi (27 bar) – 600 psi(41 bar), atomizing air 10psi (0.69 bar) to 15 psi (1.0 bar).

**Clean-Up Procedures**

All Target Coatings Emtech® Series finishes cleanup with water. Rinse spray gun fluid handling equipment thoroughly with water and alcohol mixed 1:1 after each use. If finish dries to a hard film soak gun parts in an acetone solution to soften the film for easier removal.

**Industrial Hygiene Requirements**

Use only in well ventilated areas. Avoid inhaling spray mist. Wear a NIOSH/MSHA approved respirator during spray applications.

**Emergency First-Aid**

**Ingestion:**

Administer large amounts of water.  
DO NOT INDUCE VOMITING. SEEK IMMEDIATE MEDICAL ATTENTION.

**Inhalation:**

Remove exposed person(s) to well ventilated area. Treat symptomatically.

**Eyes:**

Flush with fresh water. Seek medical attention.

**Skin:**

Wash exposed area with warm, soapy water. Seek medical attention if irritation occurs.

**Disclaimer:** The information and suggestions are, to the best of our knowledge, reliable. Since the conditions of use are beyond our control, this company cannot assume responsibility for any risk or liabilities that may result from the use of its products.