



**EMTECH EM9300™**  
**POLYCARBONATE URETHANE CLEAR COAT**  
*Interior/Exterior Grade Architectural Wood Finish*

**HAP's Free- ULTRA LOW VOC**  
 → **OUT-PERFORMS ALL NATIONAL/REGIONAL VOC REGULATIONS** ←  
**No NMP, No Hydrazine**  
**California Prop. 65-Compliant**  
**(LEED CREDIT ID: EQ4.1, EQ4.2, EQ4.5)**

Target Coatings EmTech EM9300™ Waterborne Polycarbonate Urethane is a water-clear; non-yellowing polycarbonate urethane coating engineered to provide exceptional adhesion to wood and engineered wood-type substrates. Formulated as a final topcoat for high-end applications such as interior/exterior architectural woodwork, trim, doors, cabinetry and applications that require a hard yet flexible coating in high UV exposure environments. EM9300™ offers excellent water resistance during vertical water exposures.

The clarity and depth-of-image of the EM9300™ is exceptional. When buffed to a high gloss using industrial or automotive buffing compounds, EM9300™ demonstrates a crystal clear film without the plastic look associated with acrylic finishes.

EM9300™ Waterborne Polycarbonate Urethane is available in Gloss (90°), Semi-Gloss (65°), Satin (35°) and Flat (10°) sheens.

**Physical Specifications**

**Weight per Gallon:** 8.6 lbs.  
**Percent Solids:** 30-33% NV  
**Coverage @ 2mils:** 500 sq. ft. Average  
**Flash Point:** Non-Combustible  
**Color:** Clear  
**Recommended mil Thickness:** 2-4 mils, Wet.

**Viscosity:** 40 seconds, Zahns #2  
**Actual VOC grams/liter:** 20 grams/liter  
**HAPS Content:** 0  
**Freeze/Thaw Cycles:** 3 Pass  
**Heat Cure:** 120°-140° F

**Dry Schedule:** 2 mils wet @ 70 Degrees F = 25 minutes Dry-to-Touch  
 45-60 minutes to Sand & Recoat

Target Coatings EM9300  
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**Surface Preparation:**

Architectural wood surfaces should be sanded with a minimum of 80-grit, low stearate content aluminum oxide sandpaper to remove mill glaze and any excess material. The final sanding schedule should be reviewed based on the desired final finish. A maximum of 320-grit is suggested. Surface must be clean, dry and free of any contamination by moisture, grease, oil or dirt. Remove contamination with denatured alcohol and water mixed 50:50. If heavy grease or oil is evident use a biodegradable wood cleaner to remove the contamination, then follow up with water/alcohol wash down. Wood substrates should be kiln dried and not exceed 10% moisture content.

**Application Methods:**

Target Coatings EM9300™ Waterborne Polycarbonate Urethane can be applied by brush, roller or spray method. Back brushing with a poly-bristle brush is recommended for applications onto substrates rougher than 180-grit sanding schedule to ensure even surface penetration and film formation. Product may also be applied with a lint free roller and then back brushed into the substrate. Spray methods include Conventional, HVLP, LVLP, Air-Assisted Airless & Airless sprayers. Consult with your spray equipment manufacturer to determine the appropriate gun set and air pressures based on coating viscosity and intended use. For more information on proper application methods please refer to the Master Painters Institute or contact Target Coatings, Inc.

**Applications:**

Applications will vary depending upon the specific functional requirements of this coating. A minimum of 4 coats of EM9300™ Waterborne Polycarbonate Urethane should be applied to obtain a durable film formation. All coats should be applied at 3-4 mils wet per coat on a (rough) wood substrate sanded 80g. Each coat should be allowed to dry completely for 1 hour @ 20C before recoating. Application temperatures must be above 10C° and relative humidity below 80%. Do not apply coating to substrates where the moisture content is over 10%. Excess moisture may cause film clouding, adhesion problems and premature film failure. Do not apply coating to exposed areas when rain is forecast or imminent within 24 hours.



**Tinting:**

Target Coatings EM9300™ Waterborne Polycarbonate Urethane can be tinted with water-soluble universal colorant and water-soluble dyes. Test each tinting method to ensure proper film formation and adhesion prior to commencing with the entire project. Water-based Universal Colorants from Evonik-Degussa®, CCA® or BASF® are recommended.

**Maintenance Procedure & Care:**

The expected life cycle of Target Coatings EM9300™ Waterborne Polycarbonate Urethane will vary based on UV, moisture and ambient pollution exposure. The key to long-term substrate protection is periodic inspection and maintenance of this coating. Inspect the film formation qualities of this coating as it ages. Dulling, oxidation and film thickness reduction of the cured finish is a sign that the coating is breaking down. A periodic cleaning and re-coating should occur when any of these physical signs begin to appear. Wash the effected surface with a biodegradable wood surface cleaner to remove all surface dirt and inspect for film adhesion integrity. If adhesion of the coating is acceptable, lightly abrade the surface to be recoated with a medium grade 3M Scotch-Brite® pad and rinse off residue with fresh water. Allow the surface to dry and apply 2-3 coats of Target Coatings EM9300™ Waterborne Polycarbonate Urethane as specified above. If the existing film formation is deteriorated beyond surface recoat repair, power-wash the remaining film formation off of the substrate and prep the surface for complete refinishing.

**Warnings:**

This coating is not intended for use as a waterproofing membrane or for long-term exposure to standing/pooling (horizontal) water.

**Limited Warranty:**

Since TARGET COATINGS, INC. has no control over proper surface preparation or application methods, no guarantee as to the results is offered, expressed or implied. TARGET COATINGS, INC. guarantees the contents of the can only. If the product is defective, replacement material will be furnished free of charge or a refund of the material cost at Manufacturer's option. Labor costs are not covered by this warranty. Responsibility for claims of any kind is strictly limited to the purchase price of the material.