



# emtech™

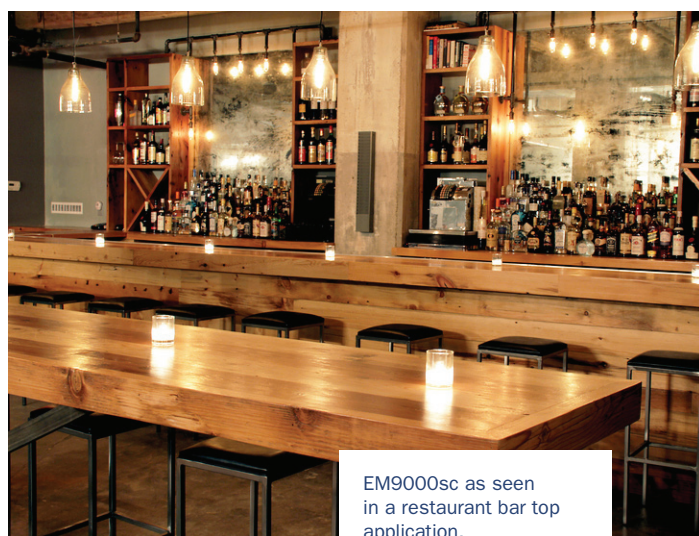
Water Based Coatings for a Changing World™

## EM9000SC SERIES SUPERCLEAR POLYURETHANE WATER-BASED INTERIOR WOOD FINISH

Leed Credit ID: EQ4.1, EQ4.2, EQ4.5

**EM9000sc SuperClear Polyurethane** is ideally suited for use as a non-yellowing clear coat for protecting painted surfaces, custom furniture, kitchen cabinets and architectural interior applications. This product can successfully replace solvent-based urethanes traditionally used for these applications. Whether used directly on wood surfaces or in conjunction the EM6500 Pigmented Lacquer or EM1000 Universal Sanding Sealer, EM9000sc SuperClear Polyurethane will demonstrate exceptional clarity without the bluish haze associated with conventional waterborne wood finishes.

**EM9000sc SuperClear Polyurethane** can be fortified with our CL100 Cross-Linker to create a post-catalyzed type urethane finish. The addition of 5 to 10% by liquid volume of CL100 will improve the physical durability of the EM9000sc by tightening the molecular structure of the cured resin. CL100 improves the resistance of the cured film against high pH cleaners, alcohols and slow evaporating household chemicals. See the TDS for CL100 for more information.



EM9000sc as seen  
in a restaurant bar top  
application.

*Photo courtesy of  
LIV Design.*

### Part Number & Sheen Chart

Part Number	Sheen Description	Gloss Reading
OHP9100	Gloss	85°
OHP9200	Semi-Gloss	60°
OHP9300	Satin	40°
OHP9400	Flat	15°



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### KCMA-Type Test Specification Results

**Substrate and Preparation:** KCMA Spot Test on Sealed Maple Veneer with 4-2mil coats of EM9000. Allowed each coat to dry for 2 hours before applying additional coats. Sand first coat only. Allowed panels to dry for 7 days at 70°F, varying humidity.

#### Chemical Resistance:

4-Hour Dwell Time / 4-Hour Recovery Time



Compound	Results
RTU Glass Cleaner	Pass—No Effect
409 <sup>™</sup>	Pass—No Effect
Warm Water (100°F)	Pass—No Effect
Black Coffee	No Stain—No Effect
Denatured Alcohol	Softening / Minor Witness Line
Acetone	Softening / Full Recovery
Lacquer Thinner	Softening / Full Recovery

### Features and Benefits

Non-Yellowing/Water White

Urethane Durability

No NMP

HAPs Free

No Hydrazine

California Prop.65 Compliant

SCAQMD Regional Compliant

LEED Compliant

Multi-Substrate Adhesion Performance

Fast Dry/Recoat Time

Water clean up

Non-hazardous/non-flammable

### Physical Specifications

Coatings Density: 8.60 lbs./Gal.

Solids % by Weight: 34%nv (gloss format)

VOC Content Actual: 42 Grams/Liter

VOC Content Regulatory: 93 Grams/Liter

HAPS Content: 0.0

pH: 35-40 Sec. Zahns #2 Cup

Dry Time: 45-50 minutes @ 3mils

Spread Rate: 400sq ft. per Gallon  
@ 3mils wet

Appearance: Off-white emulsion

Flash Point: Above 200°F

Shelf Life: 24+ months

### Spray Gun Set Up Recommendations\*

Compressed Air HVLP	1.3mm–1.5mm needle set and corresponding air cap.
Air-Assisted Airless	.09–.11 tip set
Airless	Ultra-Fine or Fine tip set

\*Consult with spray gun manufacturer for specific air pressure settings.



### Directions for Use

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.

If the surface to be finished has a grain-filling type glaze, sealer or paste; ensure that the systems are compatible with one another by preparing a test panel before proceeding. Certain solvent-based fillers and glazes may prevent proper adhesion of the topcoat if not thoroughly cured. Ensure that grain fillers have been sanded with a minimum of 400-grit sandpaper and all contamination is removed. Oil-Based glazes should be air-dried and tested to ensure proper early adhesion of the water-based topcoat. Pigmented base coats such as pigmented lacquer or acrylic sealers should be dry and lightly sanded to remove surface defect. Follow the manufacturers directions for over-coatings pigmented sealers and base coats.

Spray-apply each coat of EMTECH™ EM9000sc with HVLP, Conventional or Airless/Air-assist 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.

### Unfinished/New Wood:

1. After surfaces has been prepared remove all dust with a wax/oil-free tack cloth.
2. Gently mix EM9000sc before using.
3. EM9000sc can be sprayed without reducing with water or Target SA5 Spray Retarder. However, additions of SA5 Retarder may be required to slow-down the system if the polyurethane is drying too quickly during high temperature applications.
4. Apply the required number of coats of EM9000sc to obtain the desired film-build and final look. A minimum of 2 coats applied at 2-4 mils per wet coat is required to obtain a thin film set. There is no limit to the total number of coats of

EM9000sc that can be applied. Allow each coat to dry for a minimum of 45 minutes before recoating. Sanding between each coat is not necessary unless contamination has effected the film formation, or if the last coat has dried for more than 24 hours. Sand with 600-grit sandpaper to remove surface imperfections, runs, sags and contamination. Remove sanding dust as specified and apply final coat as required.

### Dry Time

Allow each coat to thoroughly dry before applying additional coats of polyurethane. For best results apply during low humidity conditions. If whitening or blushing occurs in the semi-cured coats, allow lacquer to return to a clear state before applying additional coats. Best temperatures are 60°-80°F. Complete chemical cure time is after 120 hours within these temperature ranges.

### Clean-Up

All Target Coatings EMTECH™ Series finishes cleanup with fresh, warm water. Rinse spray gun fluid handling equipment thoroughly with water after each use. If finish dries to hard film soak gun parts in a reduced water-based paint stripping solution.

### Emergency First-Aid Procedures

#### 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:

Flush with fresh water.  
Seek medical attention if irritation occurs.

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