



## **EMTECH™ EM6000 SERIES WATER-BASED PRODUCTION LACQUER**

**↪ HAPS FREE- ULTRA LOW VOC ↪**  
**OUT-PERFORMS ALL National and Regional VOC Regulations**  
**LEED CREDIT ID: EQ4.1, EQ4.2, EQ4.5**

**EMTECH™ EM6000 Production Lacquer (EPLv8.0)** is an ultra clear, water-based acrylic lacquer that utilizes advanced polymer resins and HAPS-Free solvent technologies to provide a unique, self-leveling wood finish designed for commercial and industrial applications. Formulated for use in furniture, cabinet, interior architectural and custom woodworking applications, EPL provides a fast drying lacquer system with exceptional clarity, outstanding adhesion qualities and a nitrocellulose-type appearance and performance in a Ultra-Low VOC (ULVOC), 100% water-based system. EMTECH™ EM6000 Production Lacquer features a unique adhesion characteristic that allows it to bond to a wide variety of properly prepared substrates such as synthetic wood panels, carbon-fibre, PVC, ferrous and non-ferrous metals. This feature gives great latitude of use for the finishing professional when working with EM6000 Production Lacquer.

When used as a self-sealing system **EM6000 Production Lacquer** offers fast drying and sanding features identical to those of traditional nitro-cellulose lacquers and CAB acrylic systems. EPL generates excellent clarity and color definition when used with other sealer or as a stand-alone production finish. EPL is non-flammable, low in odor and cleans-up with water.

### **Features and Benefits**

**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**  
**Fast Dry-Time**  
**Stronger than Nitrocellulose**  
**Excellent Clarity**  
**Water Clean Up**  
**Non-Flammable**

### **Physical Specifications**

**Solids % by Weight:**  
**Actual VOC Content:**  
**HAPS Content:**  
**pH:**  
**Weight Per Gal.**  
**Viscosity**

**28.0 – 30.0 nv**  
**31 Grams/Litre**  
**0.0**  
**8.5-9.0**  
**8.6 lbs.**  
**30-35 Sec Zahns #2**



## 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.

Spray-apply each coat of *EMTECH™ EM6000 Production Lacquer* 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. Mix EMTECH™ Lacquer well before using.
3. EMTECH™ Lacquer 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 lacquer is drying too quickly during high temperature applications.
4. Reduce EMTECH™ Lacquer upwards of 50% with water if lacquer is to be used as a pre-stain sealer or tie-coat between stain or dye coats to prevent color bleed.
5. Apply the required number of coats of EMTECH™ Lacquer 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 EMTECH™ Lacquer that can be applied. Allow each coat to dry for a minimum of 20 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 then 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.

EMTECH™ EM6000 Production Lacquer can be polished to a variety of sheen's with the use of the *Menzerna™ Polishing System* described in the Buffing Compound Section of this web site.



### Dry Time

Allow each coat to thoroughly dry before applying additional coats of lacquer. 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 100 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 and induce vomiting.  
Seek immediate medical attention.

**Eyes:** Flush with fresh water. Seek medical attention if irritation persists.

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

### KCMA-Type Test Specification Results

**Substrate and Preparation:** Testing was performed on maple veneer plywood panels sealed with 3 coats of **EM6100 Gloss Lacquer**, spray-applied at 70°F / 35% RH, at a wet mil thickness of 3mil per coat. Panels were allowed to cure for 14 days before testing.

**CHEMICAL RESISTANCE: Horizontal Position, 24-Hour Exposure (Uncovered)**  
**Water washed and Air-Dried.**

Compound	Results
Distilled Water (Room Temp)	Pass- No Effect
RTU Glass Cleaner	Pass- No Effect
RTU All Purpose Cleaner (pH 9.5)	Pass- Slight Softening, Full Recovery
Coffee	Pass- Slight Stain & Softening
Olive Oil	Pass- No Effect
Orange Juice	Pass- Slight Softening, Full Recovery
Denatured Alcohol	Pass- Film Softening, Full Recovered
Acetone	Pass/Fail- Moderate Film Degradation
Lacquer Thinner	Fail- Complete Film Degradation
<b>PRINT RESISTANCE: 4psi Weight</b>	
24hrs @70°F	No Print
1 Hour @ 100°F	No Print
1 Hour @ 140°F	No Print