



EM8000cv WB Conversion Varnish

EM8100 Gloss, EM8200 Semi-Gloss, EM8300 Satin, EM8400 Flat

Description	Emtech® EM8000cv Pre-Catalyzed Waterborne Conversion Varnish is formulated for high-end furniture and cabinetry applications that require exceptional surface hardness and water resistance coupled with traditional cv-type color tone. EM8000cv represents state-of-art formulating by utilizing our exclusive hybrid emulsion technologies that incorporate oil-modified resins and acrylic copolymers into a pre-catalyzed, one-part package. No aziridine or isocyanate is required to activate this formula – making it an exceptionally safe alternative for on-site and small shop finishing operations. EM8000cv can be fortified with our Emtech® CL100 Crosslinker to provide an enhanced boost to the resin structure if needed.	
Use	For use on furniture, cabinet, interior architectural and custom woodworking applications.	
Features & Benefits	<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>
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 surfaces 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 stains should be airdried and tested to ensure proper early adhesion of the water-based topcoat. Spray-apply each coat of Emtech® EM8000cv Waterborne Conversion Varnish 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.	
Unfinished / New Wood	<ol style="list-style-type: none"> 1. After surfaces has been prepared remove all dust with a solution of water and alcohol mixed 1:1. 2. Mix EM8000cv to disperse flattening agent as required. Strain varnish if needed. 3. EM8000cv 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 EM8000cv upwards to 10% with water prior to adding CL100 Crosslinker as required. 5. Apply the required number of coats of EM8000cv 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 EM8000cv that can be applied. Allow each coat to dry for a minimum of 30-45 minutes before recoating. 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 400-grit sandpaper to remove surface imperfections, runs, sags and contamination. Remove sanding dust as specified and apply final coat as required. 	

Physical Specifications



emtech™

Water Based Coatings for a Changing World™

EM8000CV SERIES

PRE-CATALYZED
WATERBORNE CONVERSION VARNISH

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

Coating Density: 8.60 lbs./Gal.	Solids % by Weight: 32.0 – 34.0%nv (gloss format)
VOC Content Actual: 41 Grams/Liter	VOC Content Regulatory: 94 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: 1+	Photochemical Reactivity: 0

Average Equipment Use Settings

Conventional Equipment w/Pressure Pot:	If needed, reduce with water up to 10% maximum. Nozzle size 0.055 inches (1.4 mm) -0.062 inches (1.6mm) – atomizing air 40 psi (2.8.bar)–50 psi (3.5 bar), Pot pressure 4psi (0.28 bar) to 8psi (0.55 bar).
HVLP Equipment Pressure Pot:	If needed reduce with deionized water up to 10% maximum. Nozzle size 0.55 inches (1.4mm) – 0.062inches (1.46mm) nozzle, atomizing air 4 psi (0.28 bar) 8 psi (0.55 bar).
Airless Air Assist Equipment:	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 fresh, warm 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 parts in a solution of acetone to soften the film formation for ease of 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.