



# emtech™

Water Based Coatings for a Changing World™

## EM1000 SERIES WATER-BASED UNIVERSAL SANDING SEALER

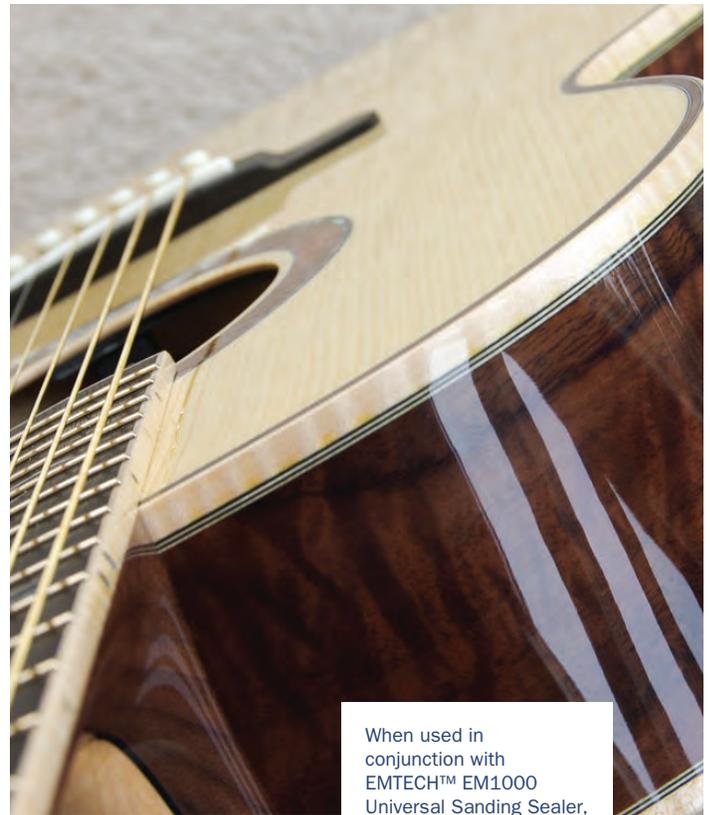
Leed Credit ID: EQ4.1, EQ4.2, EQ4.5

### Ultra-Low VOC Sanding Sealer & Pre-Stain Wood Conditioner

The philosophy behind **EM1000 Universal Sanding Sealer** is to offer a truly clear, ultra-low VOC water based wood coating that allows the true substrate color to reveal itself while remaining multi-functional as a universal intermediate base coat. EM1000 is engineered to function as; a clear, universal sanding sealer, a pre-stain wood conditioner and a color delivery vehicle, i.e. special effects spray stain, shading/toning vehicle or used as a translucent stain when tinted with universal pigments or dyes.

**EM1000 Universal Sanding Sealer** is “water white/clear” in the can. This clarity benefits the finisher in two ways. It allows the natural wood color and image to react in a way that is very similar to solvent-based sealers, and it aids the finishers “color eye” when using the EM1000 for shading/toning and performing color matching duties as a mid-level coating in a multi stage wood finishing process. Whereas a traditional acrylic emulsion such as EM6000 Production Lacquer dries clear on wood, it can be difficult to add colors for shading and toning and to determine the true color value/strength when working in its liquid format. When using the EM1000 Universal Sanding Sealer, it is easier for the finisher to visualize the direction the color strength and value is proceeding in before taking the sealer directly to the wood substrate for further evaluation. Granted, all color matches must be performed and evaluated on the final substrate of choice, but having a color vehicle that gives the finisher a clearer visual reference point “in the beaker” makes the job that much easier and faster.

EM1000 can be tinted with ANY water-soluble dye. Also, custom pigment toning/shading colors can be made when the EM1000 is tinted with water-based UTC colorants.



When used in conjunction with EMTECH™ EM1000 Universal Sanding Sealer, EM6000 can be used to create a deep, clear, lustrous finish when polished to a high gloss or rubbed to a satin/matte effect.

*Photo courtesy of Casper Guitar Company.*



## Recommended Method of Application

**Pre-Stain Conditioner:** Some wood species require a pre-stain conditioning prior to stain application in order to prevent blotching or uneven color generation. Sand surface to be conditioned with 220-grit or finer sand paper to tighten the grain. Apply 1 coat of EM1000 Sanding Sealer reduced with water 50:50 as a conditioning pre-seal. Allow pre-seal to dry for 45 minutes to 1 hour before sanding and evaluating for color application.



**Sanding Sealer:** Use EM1000 Universal Sanding Sealer undiluted to act as a traditional sanding sealer on all types of domestic and exotic wood species. Sand wood substrate with 220 or 320-grit sandpaper based on grain density and porosity of wood being sealed. Apply 2 coats of undiluted EM1000 Universal Sanding Sealer via spray or brush. The first coat of EM1000 will penetrate and dry-to-touch in 20 to 30 minutes. Allow to dry for a minimum of 1 hour before fine sanding and evaluating for clear top coat applications.

**Tinting/Shading Vehicle Options:** EM1000 Universal Sanding Sealer can be tinted with water-soluble dyes and UTC pigments for use as a shading/toning color vehicle. See the following directions.

## Recommended Tinting Colorants and Percentages by Liquid Volume

**Water Soluble Dye:** Add 0.50- 5.0% by liquid volume. Premix dye with warm water to make a liquid concentrate prior to adding into the reduced EM1000.

**Universal Tinting Colorants (UTC):** Add 1-5% UTC by liquid volume into EM1000. Thorough mix to ensure complete dispersion. Test the tinted blend to confirm complete compatibility between the EM1000 and the UTC of choice. Some UTC's may cause fisheye or other poor film forming defects in the dried EM1000.

## Physical Specifications

Coatings Density: 8.60 lbs./Gal.
Solids % by Weight: 23% nv
VOC Content Actual: 51 Grams/Litre
VOC Content Regulatory: 117 Grams/Litre
HAPS Content: 0.0
pH: 8.0 - 8.5
Viscosity: 30 Sec Zahns #2 Cup
Dry Time: 30-45 minutes at 3mils wet
Spread Rate: 400sq ft. per Gallon @ 3mils
Appearance: Clear Liquid
Flash Point: Above 200°F
Shelf-Life: 24+ Months

## Features and Benefits

100% Burn-In Technology
Ultra clear resin formula
Non hazardous / non flammable
Low sandpaper loading
Easy spray/brush application
Fast dry and recoat time
Water clean up
Ultra low VOC
HAP's Free
Exceeds all national and regional clean air regulations

## Spray Gun Set Up Recommendations\*

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

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



### Clean Up

All Target Coatings water-based finishes clean up with soap and water. Rinse brushes, spray equipment and other application tools with warm, soapy water, then follow up with a plain, clean water rinse. Do not use alcohol or oil-based solvents to thin or clean up this material.

### Emergency First-Aid Procedures

#### Ingestion:

Administer large volumes 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 persists.

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



Above:  
EM1000 Universal Sanding Sealer in glass beaker to illustrate the clarity of this unique formula.

Left:  
EM1000 Universal Sanding Sealer being spray applied over ebony stain.

*Photo courtesy of Target Coatings.*

