INDUSTRIAL COATINGS

TECHNICAL DATA SHEET

5500 SERIES

PRODUCT DESCRIPTION MFI Systems™ 5500 Series 5.0 V.O.C. Enamel is a high quality alkyd enamel formulated to provide excellent adhesion and protection to primed and pre-painted surfaces. It can be used as a single-component, quick drying enamel or mixed with MFI-500 High Solids Activator to enhance performance properties (depth of image, color and gloss retention, chemical resistance, abrasion resistance, etc.). 5500 Series can also be applied by a brush or roller for touch up applications.

COMPATIBLE SUBSTRATES

MFI 500 Series DTM Enamel Primers	MFI-580 1K DTM Primers	MFI Epoxy Max Epoxy Primers
MFI-590 Epoxy Sealers	2K Urethane Primers	Self-Etch Primers

SURFACE PREPARATIONS

The surface must be clean and free of all surface contamination. A chemical pretreatment or pretreatment primer will improve the performance properties of the coating system. See your MFI Systems™ Representative for recommendations.

MIXING

10 Parts:	MFI-5500 Series 5.0 V.O.C. Enamel
1 Part:	MFI-500 High Solids Activator
3 Parts:	MFI-400 Series Zero V.O.C. Reducers

NOTE: Mix by volume and stir thoroughly. Make sure product is at room temperature (72°F/22°C) before mixing. 5500 Series can be mixed up to 15:1:3. Do not over catalyze or paint will not cure.

APPLICATION

Apply 2-3 wet coats or until adequate coverage is achieved. Cross coating is recommended to achieve a uniform finish. Allow 15 minutes flash time between coats. See spray equipment setup and recommendations on page 2.

- Do not apply at temperatures below 50°F
- Higher gloss will result if force dried
- Excess film thickness will retard dry times and effect the recoat window
- In-Service Temperature: 180°F (slight discoloration may occur at 150°F)
- Not recommended for use on galvanized, galvaneal or zinc rich surfaces

CURE TIMES

Air-dry (assumes 77°F & 50% Relative Humidity)
To Touch: 20 – 30 min.
To Handle: 1.5 – 2 hrs.
To Recoat: < 3 hrs. (After 72 hrs., sand with 320 grit)

Bake / Force Cure
Purge Time: 10 min. (ambient)
Substrate Temp: 140°F (60°C)
Bake Time: 20 min.

See Safety Data Sheet and labels for additional safety information and handling instructions.

- The contents of this package may have to be blended with other components before the product can be used. Before opening the packages, be sure you understand the warning messages on the labels and SDSs of all component, since the mixture will have the hazards of all its parts.
- Improper handling and use, for example, poor spray technique, inadequate engineering controls, and or lack of Personal Protective Equipment (PPE), may result in hazardous conditions or injury.
- Follow spray equipment manufacturer's instructions to prevent personal injury or fire.
- Provide adequate ventilation for health and fire hazard control.
- Follow company, product SDS and respirator manufacturer's recommendations for selection and proper use of respiratory protection. Be sure employees are adequately trained on the safe use of respirators per company and regulatory requirements.
- Wear appropriate PPE such as eye and skin protection. In the event of injury, see first aid procedures on SDS.
- Always observe all applicable precautions and follow good safety and hygiene practice.
- For additional health and safety information refer to the SDS which can be found at www.mfisystems.com

INDUSTRIAL COATINGS

TECHNICAL DATA SHEET

5500 SERIES

TECHNICAL DATA:

Property	Method	Result*
Color		Various Mixed Colors
Gloss @ 60° Angle	ASTM D523	10 – 90
Pencil Hardness	ASTM D3363	HB – H
Conical Mandrel	ASTM D522	Pass
Adhesion	ASTM D3359	5B, Excellent
Humidity Resistance – 100 Hrs.	ASTM D2247	Good
Salt Spray Resistance – 200 Hrs.	ASTM B117	Good
Chemical Resistance		Good
Substrates		CRS, HRS, Aluminum

*These results were obtained over iron phosphated CRS panels with appropriate primer.

PHYSICAL PROPERTIES:

Property	Blended Value* (10:1 with MFI-500)
Weight per gallon	8.3 ± 2.0 lbs./gal.
Weight Solids (%)	55.2 ± 6.0
Volume Solids (%)	32.0 ± 3.0
VOC (less exempts)	5.0 lb./gal.
VOC (actual)	5.0 lb./gal.
Coverage (@1mil, no loss)	510 - 606 sq. ft./gal.
Shelf Life	12 months

*Blended values listed will be color dependent.

APPLICATION:

Mixing Instructions: Mix by volume. Stir thoroughly.

10 Parts: MFI-5500 Series 5.0 V.O.C. Enamel
1 Part: MFI-500 High Solids Activator
3 Parts: MFI-400 Series Zero V.O.C. Reducers

Wet Film Thickness: 3 – 4 mils per coat
Dry Film Thickness: 1.5 – 2 mils per coat
Reducers: Fast – MFI-465 Reducer, Medium – MFI-475 Reducer, Slow – MFI-485 Reducer
(Use of the following reducers will increase V.O.C.s above 5.0 lb./gal.: MFI-365, MFI-375, MFI-385)
Pot Life: 2 hours @ 77°F (25°C)

Spray Application	Spray Equipment*	Fluid Pressure (psi)	Atomization Pressure (psi)	Fluid Nozzle	Air Nozzle
Conventional	Binks 2001	20 - 25	45 - 50	66SS (0.070", 1.8mm)	67PB
Conventional	DeVilbiss MBC-510	20 - 25	45 - 50	E (0.070", 1.8mm)	92
HVLP	DeVilbiss JGHV	20 - 25	50 - 55**	E (0.070", 1.8mm)	83MP
Airless	Graco G-40	1500 - 2400	n/a	0.013 - 0.019"	n/a
Air Assisted Airless	Graco G-40	900 - 1300	20 - 40	0.011 - 0.015"**	249596

*or equivalent ** atomization pressure should read <10 psi @ the cap

The technical data presented is information believed by MFI Systems™ to be currently accurate; however, no guarantee of accuracy, comprehensiveness or performance is given or implied. Continuous improvements in coating technology may cause future technical data to vary from what is in this document. Product is intended for application by trained personnel in a factory or shop application. Do not attempt to use product without the current Safety Data Sheet. The performance of a product can fluctuate due to surface preparation technique, method of application, operating conditions, the material it is applied to or with, and use. It is strongly recommended that products be tested with respect to these factors prior to full scale use.