



## GENERAL INFORMATION

MS-20 High Performance Urethane Clearcoat is easy to spray and provides a durable final finish. MS-20 High Performance Urethane Clearcoat is a productive and versatile choice for automotive refinishing.



### 1. COMPONENTS

- MS-20 High Performance Urethane Clearcoat
- MH-43 Premium Hardener
- MH-005 Normal Premium Hardener
- MH-006 Slow Premium Hardener
- MH-008 Very Slow Premium Hardener



### 2. MIXING RATIO (2:1)

- Mix two (2) parts MS-20 High Performance Urethane Clearcoat with one (1) part MH Series Hardeners.



### 3. POT LIFE @ 77°F (25°C)

- Sprayable 30-60 minutes depending on hardener selection

**NOTE:** Pot life will shorten as temperatures increase. Matrix System products are not recommended for use in temperatures below 65°F



### 4. CLEAN UP

- Clean equipment immediately after use (check local regulations)



### 5. ADDITIVES

• **Accelerator:** 1/2oz per sprayable quart. MX-081 or MX-084 accelerator may be helpful to assure proper curing in colder weather when air dry is the only option.

\*Not to be used with MH-43 Hardener

• **Retarder:** 5% per sprayable quart. Retarder MR-899 will retard, or slow the initial dry allowing slightly more time for overspray to melt in to the surface when spraying in high temperatures, high humidity, or large jobs

\*Not to be used with MH-43 Hardener

• **Fisheye Eliminator:** 1/2oz per sprayable quart. MX-01 is generally discouraged, however, when used as recommended, it may help minimize the surface reaction to contamination. The use of this additive is not a substitute for proper cleaning and preparation.

• **Flex Additive:** 10% to ready to spray MS-20.

\*NOTE: Adding additional materials to a ready-to-spray product will increase the VOC as applied. Check mixture and local regulations to assure compliance



### 6. SURFACE PREPARATION

FOR APPLICATION OVER RECOMMENDED BASECOAT SYSTEM ONLY

- Allow basecoats sufficient dry times



#### OEM BLEND AREAS

Option 1:

- Clean blend area with appropriate Matrix surface cleaner based on local regulatory compliance.
- Scuff blend area with gray scuff pad and sanding paste
- Sanding paste must be thoroughly washed away
- Reclean blend area with Matrix surface cleaner prior to topcoating

Option 2:

- Clean blend area with appropriate Matrix surface cleaner based on local regulatory compliance
- Sand blend areas with P800 - P1000 grit paper, for hard to reach areas scuff with gray scuff pad
- Reclean blend area with Matrix surface cleaner prior to topcoating

\*NOTE: Option 1 and 2 the OEM Blend area must be scuffed or sanded completely dull

### 7. TOPCOATS

- N/A



### 8. TECH NOTES

• Matrix does not recommend nor warranty the blending of clear coats. Over reduction or solvent blending of the clear coat will become visible over time due to UV exposure on the blended edge. The edge may also fade or peel over time due to the minimal film thickness of the blended edge.

• Matrix recommends applying clear coat to the entire panel. Many of today's late model cars do not have a distinct edge or a break line on the quarter panel, in these cases Matrix recommends applying the clear coat to the roof and the opposite quarter panel.

• This procedure will assure a professional repair, that returns the vehicle back to pre accident condition



### 9. SUBSTRATES (Properly Prepared)

- All Matrix Refinish Basecoats
- Existing OEM Finishes



### 10. APPLICATION

• Apply two (2) to three (3) single wet coats.

• Where clearcoating can't be continued to edge of panel the clearcoat edge can be "melted" with MX-840 EZ Blend Edge Blender

\*See Notes for additional information



### 11. FLASH / DRY TIMES

AIR DRY @ 77°F (25°C)

Flash (after 1st coat)	10-15 minutes
Flash (after 2nd coat)	15-20 minutes
Out-of-Booth	30-60 minutes depending on temp
Deliver/Polishing/Recoating	16-24 hours

Force Drying @ 140°F (60°C)

Purge Time	10 minutes
Bake Time	40 minutes
Deliver/Polishing/Recoating	After 1 hour cool down

\*NOTE: Dry times may vary due to temperature, humidity, film thickness and airflow. If extreme color sanding and buffing is needed allow overnight dry time.



### 12. SPRAY GUN SET UP

HVLP/LVLP - Fluid Tip Size	1.3 mm - 1.4 mm
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#### AIR PRESSURES

- Refer to spray gun manufacturer's recommendations for regulatory compliance



### 13. PHYSICAL DATA

SEE PAGE 2

If used as instructed, this product is designed to comply with the US National Volatile Organic Compound (VOC) Emission Standard for Automobile Refinish Coatings. Confirm compliance with state and local air quality rules before use. The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option.



## 13. PHYSICAL DATA

RTS REGULATORY DATA WITHOUT ADDITIVES	2:1	
	LBS./GAL.	g/L
Actual VOC	4.32	517
Regulatory VOC (less water and exempt solvents)	4.32	517
Density	8.34	999
	WT.%	VOL.%
Total Solids Content	48.3	41.8
Total Volatile Content	51.8	58.2
Water	0	0
Exempt Compound Content	0	0
Coating Category	Clearcoat	

**NOTE:** US Regulations allow for the use of exempt compounds for VOC calculations.

WORST CASE RTS REGULATORY DATA WITH ADDITIVES	2:1:5%:1.5%:10% (MS-20:MH-005:MR-899:MX-01:MX-841)	
	LBS./GAL.	g/L
Actual VOC	4.58	549
Regulatory VOC (less water and exempt solvents)	4.58	549
Density	8.27	991
	WT.%	VOL.%
Total Solids Content	44.6	38.7
Total Volatile Content	55.4	61.3
Water	0	0
Exempt Compound Content	0	0
Coating Category	Clearcoat	

### Flattening Table

Clear/Color System	Gloss	Ounces of MX-85	Ounces of Hardener
MS-20	Flat	25	MH-005/006 16
	Eggshell	19	16
	Semi-Gloss	14	16

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