MS-52 Universal Urethane Clearcoat

GENERAL INFORMATION

MS-52 Universal Urethane Clearcoat is a high gloss, 4:1 mix clearcoat. MS-52 Universal Urethane Clearcoat is easy to use making it an excellent value for body shops under various conditions.

1. COMPONENTS

- MS-52 Universal Urethane Clearcoat
- MH-43 Premium Hardener - Spot & Panel
- MH-005 Premium Hardener - Normal
- MH-006 Premium Hardener - Slow
- MH-008 Premium Hardener - Very Slow

2. MIXING RATIO (4:1)

- Mix four (4) parts MS-52 Universal Urethane Clearcoat with one (1) part MH-Series Urethane Hardeners.

3. POT LIFE @ 77°F (25°C)

- Sprayable 30-60 minutes

NOTE: Pot life will shorten as temperatures increase. Matrix Edge™ System products are not recommended for use when panel temperature is below 60°F.

4. CLEAN UP

- Clean equipment immediately after use (check local regulations)

5. ADDITIVES

- **Accelerator*:** 1/2 oz 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.
- **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
- **Fisheye Eliminator:** 1/2 oz per srayable 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.
- **Flattening:** See flattening table below.
- **Flex Additive:** 10% of MX-841 to ready to spray MS-52.

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

***Not to be used with MH-43 Hardener**

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 Edge 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 Edge surface cleaner prior to topcoating

Option 2:

- Clean blend area with appropriate Matrix Edge 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 Edge 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

- N/A

9. SUBSTRATES

- All Matrix Edge 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

11. FLASH / DRY TIMES

AIR DRY @ 77°F (25°C)

Flash (after 1st coat)	5-10 minutes
Flash (after 2nd coat)	10-15 minutes
Out-of-Booth	30-60 minutes depending on temp
Deliver/Polishing/Recoating	12-24 hours

Force Drying @ 140°F (60°C)

Purge Time	10 minutes
Bake Time	30 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

AIR PRESSURES

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

13. PHYSICAL DATA

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13. PHYSICAL DATA

RTS REGULATORY DATA WITHOUT ADDITIVES	4:1	
	LBS./GAL.	g/L
Actual VOC	3.47	416
Regulatory VOC (less water and exempt solvents)	4.38	525
Density	7.79	933
	WT.%	VOL.%
Total Solids Content	37.8	31
Total Volatile Content	62.2	69
Water	0	0
Exempt Compound Content	17.6	21
Coating Category	Clearcoat	

WORST CASE RTS REGULATORY DATA WITH ADDITIVES	4:1:5%:1.5%:10% (MS-52:MH-005:MR-899:MX-01:MX-841)	
	LBS./GAL.	g/L
Actual VOC	3.86	463
Regulatory VOC (less water and exempt solvents)	4.70	563
Density	7.8	935
	WT.%	VOL.%
Total Solids Content	35.4	29
Total Volatile Content	64.6	71
Water	0	0
Exempt Compound Content	15.1	18
Coating Category	Clearcoat	

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

Flattening Table

Clear/Color System	Gloss	Ounces of MX-85LV	Ounces of Hardener
MS-52 (32 oz)			MH-52F/N/S
	Flat	15	8
	Eggshell	11	8
	Semi-Gloss	9	8

NOTES

• Valspar 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.

• Valspar 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 Valspar 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

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