

MS-52

UNIVERSAL URETHANE CLEARCOAT

Technical Data Sheet

Technical Hotline 800.735.0303

PRODUCT NUMBER

MS-52

DESCRIPTION

UNIVERSAL URETHANE CLEARCOAT

HARDENERS

MH-005
MH-006
MH-008
MH-43

DESCRIPTION

PREMIUM HARDENER NORMAL
PREMIUM HARDENER SLOW
PREMIUM HARDENER VERY SLOW
PREMIUM HARDENER SPOT & PANEL

REDUCERS

NOT RECOMMENDED

DESCRIPTION

NOT RECOMMENDED

DESCRIPTION

MS-52 Universal Clearcoat is a medium solid 4.4 VOC clear. MS-52 is fast drying, high gloss, user friendly product ideal for overall, spot & panel refinishing.

COMPATIBLE BASECOATS/TOPCOATS

- MPB
- MSB
- MAU*
- MCU*
- DBU®
- DBC®
- DAU®*
- Omni®
- CHROMAPREMIER®
- CHROMABASE®
- Nason®
- Dimension®
- Ultra 7000®
- GLASURIT 55®
- LIMCO SUPREME®
- Autobase®

**Tech Tip:* For clearcoat integration technique refer to specific manufacturers single stage finish technical data sheet.

SURFACE PREPARATION



1. Allow the final coat of basecoat to dry 30 minutes prior to applying clearcoat.
2. Use a tack cloth to remove any surface contaminants that may have settled on the basecoat.
3. Apply Matrix System Clearcoat.

**Tech Tip:* Extend basecoat dry time to 30 minutes when applying several base color coats, tri coat colors, multiple graphic overlays, or in cooler shop conditions.

MIXING RATIO



MS-52 : MH-005/006/008/43
4 Parts : 1 Part

***Tech Tip:** The use of MH-43 is intended for spot & panel repairs only! The use of MH-008 is intended for extreme temperatures.

FLATTENING ADDITIVE MIXING RATIO

Clearcoat	Gloss	Ounces of MX-85	MR-0800 Series Reducer	Ounces of Hardener
MS-52 32 Oz. (1 Qt.)	Flat	15	0	8
	Eggshell	11	0	8
	Semi-Gloss	9	0	8

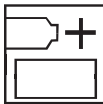
POT LIFE



Hardener	Time	Temp
MH-005/006/008	8-10 Hours	77°F
MH-43	4-5 Hours	77°F

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

ADDITIVES



ACCELERATOR

Use up to 1/2 fluid ounce of MX-081 or MX-084 Accelerator with MH-005 Hardener per sprayable quart. The addition of MX-081 or MX-084 will reduce cure times by 50%. The use of MX-081 will reduce pot life by 50%. The use of MX-081 will not increase VOC in areas where acetone is exempt.

***Tech Tip:** Do not use MH-43 with accelerator.



FISH EYE

The use of fish eye eliminator is strongly discouraged. If a fish eye additive is needed, use MX-01 urethane fish eye eliminator, mix 1/2 ounce per sprayable quart. Use no more than necessary as it will directly affect the flow out of MS-52.

APPLICATION

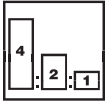


Apply 2-3 full wet coats at 40-50 psi or (6-10 psi when using HVLP at the aircap), allowing a 10-15 minute flash time between coats.



GUN TYPE	HVLP	Conventional
SIZE	1.3 - 1.7 mm	1.3 - 1.7 mm
PSI	6 - 10 at Aircap	40 - 50 at Gun

APPLICATION CONT'D



PAINTING FLEXIBLE PARTS

A flexible additive may be needed when painting certain flexible parts.

MS-52 : MH-005/006/008/43 : MX-841
4 Parts : 2 Parts : 1 Part

***Tech Tip:** Full panel only when part is off the vehicle, it is not necessary to add MX-841 when the part is mounted on the vehicle. Reference the MX-841 Technical data Sheet for additional information.



BLENDING

Dry edges can be blended in by reducing clearcoat 100%-150% and lightly misting the area to be blended out.

***Tech Tip:** When blending clearcoat, use MR-Reducer one temperature range slower than was used during application (i.e. MR-0870 used during application, switch to MR-0885 to blend clearcoat edge in).

DRY & FLASH TIME INFORMATION



DRY TIMES AT 77° F

FLASH TIME
TO SAND
TO DELIVER

MH-005/006/008

20 MINUTES
16 HOURS
16 HOURS

MH-43

15 MINUTES
8-10 HOURS
8-10 HOURS



FORCE DRYING AT 140° F

PURGE TIME
BAKE TIME AT 140°F

15 MINUTES
30 MINUTES

REPAIRING & RECOATING



MS-52 may be recoated after a 16 Hour dry at 77°F, or after a minimum 1 hour cool down after force drying at 140°F for 30 minutes.

BUFFING



Allow 16-24 hours before sanding or buffing MS-52. Temperature, humidity and film thickness will affect buff times. When force drying, allow 1 hour cool down before buffing or polishing MS-52.

EQUIPMENT CLEANUP



Clean equipment immediately after use with MX-110 Gun Wash or a high quality lacquer thinner.

TECHNICAL DATA

Clear: 4 parts MS-52
 Hardeners: 1 part MH-005, MH-006, MH-008 or MH-43
 Viscosity (RTS): 17 - 19 seconds #2 Zahn
 Weight Solids (RTS): 36 - 37%
 Film Build: 0.8 - 1.0 mils per full wet coat
 Coverage: 485 sq. ft. per gallon @ 1 dry mil

V.O.C. as Delivered:	Regulatory VOC in LBS./GAL.	Regulatory VOC in G./L.	Material VOC in LBS./GAL.	Material VOC in G./L.
MS-52	4.6	546	3.4	404
MH-005	3.9	470	3.9	470
MH-006	3.7	444	3.7	444
MH-008	3.7	444	3.7	444
MH-43	3.9	470	3.9	470
V.O.C. (RTS):				
MS-52/MH-005	4.4	527	3.5	417
MS-52/MH-006	4.3	521	3.4	412
MS-52/MH-008	4.3	520	3.4	412
MS-52/MH-43	4.4	527	3.5	417

Disposal/Safety: see MSDS for this product
 Humidity Resistance: Excellent
 Salt Spray Resistance: Excellent
 MSDS Reference #: MX-SD2

FOR INDUSTRY USE ONLY
Read MSDS Before Use

The contents of the package must be blended with other components before the product can be used. Any mixture of components will have hazards of all components. Before opening the packages, read all warning labels. Follow all precautions.

The material is designed for application only by professionally trained personnel using proper equipment under controlled conditions, and is not intended for sale to the general public.

SEE MSDS AND PRODUCT LABELS FOR ADDITIONAL SAFETY INFORMATION.

NOTE: Matrix Systems products are not recommended for use in temperatures below 65°F. Use below these temperatures will effect dry times and performance.

Put it to the test!
www.matrixsystem.com