

MS-47

SUPER PRODUCTIVE CLEARCOAT

Technical Data Sheet

Technical Hotline 800.735.0303

PRODUCT NUMBER

MS-47

DESCRIPTION

SUPER PRODUCTIVE CLEARCOAT

ACTIVATORS

MA-455

MA-457

DESCRIPTION

SUPER PRODUCTIVE ACTIVATOR - NORMAL

SUPER PRODUCTIVE ACTIVATOR - HIGH TEMP

REDUCERS

MR-0800

MR-100LV

DESCRIPTION

REDUCER SERIES

LOW VOC REDUCER

DESCRIPTION

MS-47 is a super productive 90 minute air dry, high solids clearcoat with excellent gloss and Distinctness Of Image. Cutting edge technology allows, fast curing and same day delivery without die back, while eliminating the need and expense of force drying.

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 MS-47 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 (4.2 VOC)



MS-47 : MA-455 or MA-457 : MR-0800 Series Reducer
3 Parts : 1 Part : 1 Part

MIXING RATIO (3.5 VOC)



MS-47 : MA-455 or MA-457 : MR-100LV
3 Parts : 1 Part : 1 Part

*Tech Tip: Slower reducer will help flow-out.

FLATTENING ADDITIVE MIXING RATIO

Clearcoat	Gloss	Ounces of MX-85	MR-0800 Series Reducer	Ounces of Hardener
MS-47 32 Oz. (1 Qt.)	Flat	26	4	11
	Eggshell	22	2	11
	Semi-Gloss	18	4	11

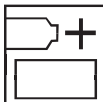
POT LIFE



Hardener : Time : Temp
MA-455 / 457 : 1-2 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 **MA-455 / 457** 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.



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-47.

APPLICATION



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

APPLICATION CONT'D



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

PAINTING FLEXIBLE PARTS

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

<u>MS-47</u>	:	<u>MA-455/457</u>	:	<u>MR-0800</u>	:	<u>MX-841</u>
3 Parts		2 Parts		1 Part		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	<i>MA-455/457</i>
FLASH TIME	10-15 MINUTES
TO SAND	90 MINUTES - 5 HOURS
TO DELIVER	90 MINUTES - 5 HOURS



FORCE DRYING AT 140° F	
PURGE TIME @ 77° F	5-10 MINUTES
BAKE TIME AT 140° F	20 MINUTES

REPAIRING & RECOATING



MS-47 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 20 minutes.

BUFFING



Allow 90 minutes - 5 hours before sanding or buffing MS-47. Temperature, humidity and film thickness will affect buff times. When force drying, allow 1 hour cool down before buffing or polishing MS-47.

***Tech Tip:** After 5 hours clearcoat may be hard to buff.

EQUIPMENT CLEANUP



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

TECHNICAL DATA

Clear:	3 parts MS-47
Activators:	1 part MA-455 or MA-457
Reducer:	1 part MR-0800 (4.2 VOC) or MR-100LV (3.5 VOC)
Viscosity (RTS):	19 - 22 seconds #2 Zahn
Weight Solids (RTS):	45.5%
Film Build:	1.0 - 1.5 mils per full wet coat
Coverage:	640 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-47	3.9	470	3.9	467
MA-455	2.4	284	2.4	284
MA-457	2.4	284	2.4	284
MR-100LV	0.0	0	0.0	0
MR-0860	6.7	801	3.0	359
MR-0870	7.0	839	7.0	839
MR-0885	7.0	839	7.0	839
MR-0895	7.0	839	7.0	839
MR-0898	6.9	824	6.9	824
V.O.C. (RTS):				
MS-47/MA-455/MR-100LV	3.5	423	2.8	337
MS-47/MA-455/MR-0860	3.9	461	3.4	409
MS-47/MA-455/MR-0870	4.2	507	4.2	505
MS-47/MA-455/MR-0885	4.2	507	4.2	505
MS-47/MA-455/MR-0895	4.2	507	4.2	505
MS-47/MA-455/MR-0898	4.2	507	4.2	505
MS-47/MA-457/MR-100LV	3.5	423	2.8	337
MS-47/MA-457/MR-0860	3.9	462	3.4	409
MS-47/MA-457/MR-0870	4.2	507	4.2	505
MS-47/MA-457/MR-0885	4.2	507	4.2	505
MS-47/MA-457/MR-0895	4.2	507	4.2	505
MS-47/MA-457/MR-0898	4.2	507	4.2	505

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

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CLEARCOAT