

MSV-27

2.1 VOC LIGHTNING™ URETHANE CLEARCOAT

Technical Data Sheet

Technical Hotline 800.735.0303

PRODUCT NUMBER

MSV-27

DESCRIPTION

2.1 VOC LIGHTNING™ URETHANE CLEARCOAT

HARDENERS

MHV-21F
MHV-21N
MHV-21S

DESCRIPTION

2.1 VOC FAST URETHANE HARDENER
2.1 VOC NORMAL URETHANE HARDENER
2.1 VOC SLOW URETHANE HARDENER

REDUCERS

NOT RECOMMENDED

DESCRIPTION

NOT RECOMMENDED

DESCRIPTION

MSV-27 with Lightning™ Cure Technology cures rocket fast for same day delivery. This easy to use clear is designed for high gloss, easy application and fast buffing under air dry or forced dry conditions.

**Tech Tip:* The use of urethane grade solvents will increase the VOC of MSV-27 above the 2.1 lbs/gl compliance regulation, and may contribute to solvent pop, delamination or other related problems.

COMPATIBLE BASECOATS/TOPCOATS

- MPB
- MSB
- MAU*
- MCU*
- AWB
- 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 MSV-27 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



MSV-27 : MHV-21F/N/S
4 Parts : 1 Part

FLATTENING ADDITIVE MIXING RATIO

Clearcoat	Gloss	Ounces of MX-85	MR-0800 Series Reducer	Ounces of Hardener
MSV-27 32 Oz. (1 Qt.)	<i>Flat</i>	18	0	8
	<i>Eggshell</i>	11	0	8
	<i>Semi-Gloss</i>	9	0	8

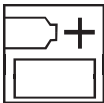
POT LIFE



Hardener : Time : Temp
MHV-21F/N/S : 3-5 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

The use of MX-081 and MX-084 is discouraged.



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 MSV-27.

APPLICATION



Apply 2-3 **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. Keep spray gun 6-10 inches from substrate to avoid problems associated with air entrapment.



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.

MSV-27 : MHV-21F/N/S : 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 RTS 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	10-15 MINUTES
TO SAND	90 MINUTES - 5 HOURS
TO DELIVER	90 MINUTES - 5 HOURS



FORCE DRYING AT 140° F

PURGE TIME	10 MINUTES
BAKE TIME AT 140°F	20 MINUTES

REPAIRING & RECOATING



MSV-27 may be recoated after a 6-8 hour dry at 77° F, or after a minimum 1 hour cool down after force drying at 140° F for 30 minutes.

BUFFING



Allow 2 hours before sanding or buffing MSV-27. Temperature, humidity and film thickness will affect buff times. When force drying, allow 1 hour cool down before buffing or polishing MSV-27.

EQUIPMENT CLEANUP



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

TECHNICAL DATA

Clear: 4 parts MSV-27
 Hardeners: 1 part MHV-21F, MHV-21N or MHV-21S
 Viscosity (RTS): 17 - 19 seconds #2 Zahn
 Weight Solids (RTS): 32.05%
 Film Build: 1.0 mils per full wet coat
 Coverage: 514 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.
MSV-27	2.6	313	1.1	126
MHV-21F	0.9	106	0.6	68
MHV-21N	0.9	106	0.6	68
MHV-21S	0.9	106	0.6	68
V.O.C. (RTS):				
MSV-27/MHV-21F	2.1	253	1.0	114
MSV-27/MHV-21N	2.1	253	1.0	114
MSV-27/MHV-21S	2.1	253	1.0	114

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