



GENERAL INFORMATION:

HS Matt Clear Coat is a premium system that consists of 8-407 HS Low Gloss Clear and 8-409 HS Semi Gloss Clear, with a dedicated hardener and thinner. This versatile clear coat system was specially developed to reproduce a wide range of gloss levels through mixing of the HS Low Gloss and HS Semi Gloss clears. This is a high quality polyurethane clear coat system, with high durability, for application over DeBeer WaterBase 900+ Series and DeBeer BeroBase 500 Series. Suitable for panel or full body repairs with very good drying and application properties.



COMPONENTS:

8-407 HS Low Gloss Clear
8-409 HS Semi Gloss Clear
8-455 HS Matt Hardener
8-451 HS Matt Thinner



MIXING RATIO:

3 : 1 + 25% by volume

Once you have created your gloss level mixture, mix:

8-407/8-409 HS Gloss Level Mixture: 3 parts

8-455 HS Matt Hardener: 1 part

8-451 HS Matt Thinner + 25 %



GLOSS LEVELS:

Gloss levels	8-407 Low Gloss (wt % or vol %)	8-409 Semi Gloss (wt % or vol %)	Gloss Units (60°)
M1	70	30	0-10
M2	50	50	10-20
M3	30	70	20-30
M4	20	80	30-45
M5	0	100	45-60

NOTE: See ICRIS for complete weight conversion.



NOTE: To verify the gloss level and color match, it is recommended that a test panel is sprayed before the vehicle is repaired. Refer to the HS Matt level swatches for additional information.



POT LIFE at 20°C / 70°F

• 8-455 HS Matt Hardener: One (1) Hour



CLEAN UP:

Use De Beer Refinish 1-051 Gun Cleaner (check local regulations)



SURFACE PREPARATION:

Base coat should be fully dry.

See the supplementary information or associated system technique.



GUN SET UP: See manufacturer info

	Nozzle size (mm)	air pressure bar / psi
HE	1.3-1.4	26-30 psi / 1.8-2.0 bar



SUBSTRATES:

WaterBase 900+ Series (MM 900-999)

500 BeroBase Series (MM 500-599)



STORAGE / SHELF LIFE:

Under normal storage conditions 10 - 30°C (50 - 90°F) up to two years in unopened container.



APPLICATION:

2.5 coats (45-60 µm or 1.8-2.4 mils)

Recommended application temperature is 15-30°C (59-86°F)



Use suitable respiratory protection (we recommend the use of a fresh air supply respirator).



0,5 coats (@ 20 cm /in)	10 - 15 minutes flash off
2 medium-wet closed coats with cross layer application	15 - 20 minutes flash off between cross layers
Before Force Cure	30 minutes flash off

REMARKS: (1) The mist layer & flash-off period between coats and prior to baking is critical for the gloss level and even appearance. (2) Cross layer application is important.

NOTE: The flash-off times may vary depending on application conditions. Film thickness and application technique are also important. Thin films and dry application will give lower gloss, while thick films and heavy application will give higher gloss.



FLASH OFF / DRY TIMES

AIR DRY @ 21°C (70°F)

Flash Off	N/A
Dust Free	10 - 15 minutes
Dry to Handle	2 - 3 hours
Dry to Tape	4 - 5 hours
Full Cure	16 - 24 hours

FORCED DRY @ 60°C (140°F)

Flash Off	30 minutes
Dust Free	N/A
Dry to Handle	15-30 minutes
Dry to Tape	After Cooling Down
Full Cure	After Cooling Down

All times above depend on the layer thickness and temperature.



INFRARED CURE:

After full flash off and at proper distance	
Medium wave	15-20 minutes
Short wave	10-15 minutes
See IR manufacturer information	

EU regulations		
VOC code	2004/42/IIIB(e)(840)560	
Product sub category (according directive 2004/42/EC) and max VOC content (ISO 11890-1/2) of the ready to use product.	IIB/e. Special finishes - All types. EU limit values: 840g/L (2007). This product contains a maximum of 560g/L VOC.	
Physical properties		
8-407 & 8-409	Chemical Base	Clear Polyurethane finish
	Specific Gravity	0.969-1.069 g/L
	Flash point closed cup	27°C
	Vol. % solids	40-42
Ready to Spray	Viscosity	14-19 sec Din Cup 4 21°C (70°F)
	Economy	8.3 m²/L/50 µm
	Gloss	Variable Gloss
	Colour	Semi Opaque

Note: Check local regulations before use.

CARE GUIDE FOR *BODYSHOPS*



REPAIR PREPARATION AND APPLICATION



It's important to prepare an existing matt system finish correctly. In particular:

- Keep the repair area completely clean. Use the recommended DeBeer cleaners and tack cloths on all repair areas during all stages of the repair. We always recommend wearing clean gloves.
- Check before applying masking tape. An existing matt clear finish may be affected by masking tape adhesive. Test your tape on a low-visibility area of the car first, and look to see if it marks the film or affects the gloss. Minimise the time that the masking tape is in contact with the existing finish, and remove any tape prior to force-curing the repair.
- Ensure your final coat is free of dust/dirt. Small dirt nibs can be removed from the existing layers of a matt clear system and the basecoat layers as normal. However it's not possible to remove dust/dirt from the final matt clear coat. If imperfections are present, you'll need to respray the panel(s). Matt clear coat panel blending is not possible with this type of system.
- Spray a test panel first. OEM matt system finishes vary, and can change over time, which is why this versatile system was specially developed to reproduce a wide range of gloss levels. To verify the gloss level and colour match of any matt clear coat system, you should spray a test panel before the vehicle is repaired. Refer to the DeBeer Matt Clear Swatch for additional colour and gloss information.



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CARE GUIDE FOR *BODYSHOPS*

Applying DeBeer Matt Clear

The application guidelines in the Technical Data Sheet (TDS) provide the best advice for a successful repair. The following points are important:



- The flash-off period between coats and prior to baking is critical for the gloss level and an even appearance.
- Flash-off times may vary depending on application conditions.



- Cross layer application is essential.
- Film thickness and application technique affect the finish. Thin films or dry application will give a lower gloss appearance, while thick films or heavy wet application will give a higher gloss appearance.

CLEANING, PRESSURE-WASHING AND DRYING VEHICLES AFTER MATT CLEAR REPAIRS



When vehicle cleaning is required, here are the products and the procedure we recommend:

Recommended products

- Pressure washer - 80 bar (1200 psi) or less rated. The tip should be 45° or larger, and held at least 30 cm (12 inches) from the surface. Do not hold the spray in one place for extended periods. Keep the nozzle in motion.
- Soft microfiber cloths/sponges.
- Matt finish cleaner or gentle non-abrasive soaps. Always follow the manufacturer's dilution instructions and recommendations.
- Two large buckets with dirt separators.

Recommended procedure

- Pre-wet the vehicle with a pressure washer to cool and remove the large areas of dirt that could damage the vehicle finish.
- Fill one bucket with soap and water, and the second bucket with clean water.
- Take turns during the washing process to rinse the microfiber cloths/sponges out, to remove any dirt from the cloth/sponge that may scratch the finish, and to keep the soap solution as clean as possible.
- Rinse the area completely before moving onto a new one.
- To dry, use a clean soft damp microfiber cloth to remove the excess water.



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