



ENVIROBASE®
HIGH PERFORMANCE

PPG's advanced waterborne basecoat system
ENGINEERED FOR EXCELLENCE



Product Information

En-V Performance Clearcoat

LVC-136

PRODUCTS

En-V Performance Clearcoat	LVC-136
Low VOC Hardener	LVH-320
Low VOC Thinners	LVT-430; LVT-420; LVT-410
Low VOC Clearcoat Accelerator Thinner	LVT-444 or LVT-440

PRODUCT DESCRIPTION

En-V Performance Clearcoat is a premium Ultra High Solids polyurethane clearcoat specifically formulated for use as a premium re-spray clear over ENVIROBASE® High Performance basecoat. However, when used in conjunction with LVT-444 or LVT-440, the single visit application mode and 15 minute bake time can be utilised.

PREPARATION OF SUBSTRATE



En-V Performance Clearcoat may only be applied to clean and dust free ENVIROBASE® High Performance basecoat. The use of a clean tack rag is highly recommended to remove dust from the basecoat film.



Fully cured PPG Refinish Clearcoats that have been degreased and sanded
Sound OEM Clearcoats that have been degreased and sanded

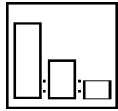
Substrates other than those stated should be tested before use, to ensure that the performance of the product is suitable for its intended use.

Application Guide

Mixing Ratio PRODUCT

LVC-136

LVH-320



THINNER

LVT- 4XX Thinner

PARTS

3 VOLUME

1 VOLUME

0.6 - 1 VOLUME

Thinner choice is dependant on temperature and the size of the area being coated.

NOTE: Where the temperature exceeds 35°C LVT-405 must be used

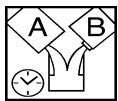
As is usual with UHS type clearcoats, cold product temperatures can lead to difficult application and overspray absorption. To avoid this it is recommended that ready for use product is applied at above 15°C

HARDENER AND THINNER SELECTION

System	Hardener	Thinner	Bake time
Express	LVH-320	LVT-444	15 mins at 60°C
Express	LVH-320	LVT-440/LVT-410 50/50 mix	15 mins at 60°C
Standard	LVH-320	LVT-410	25 mins at 60°C
Up to 35°C	LVH-320	LVT-420 or LVT-410	25 mins at 60°C
Standard (above 35°C)	LVH-320	LVT-405	25 mins at 60°C
Small parts only	LVH-320	LVT-440 or LVT-444	15 mins at 60°C

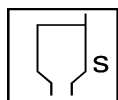
The choice of thinner is made relevant to the application temperature, air movement and the size of the area being clearcoated.

POTLIFE @ 20°C



1 hour

SPRAY VISCOSITY @ 20°C



18 - 20 Seconds (DIN4)

SPRAYGUN SETUP



1.2mm - 1.3mm
(SATA 1.2 RP suggested)

SPRAY PRESSURE

HVLP / RP

2 – 3 bar

CONVENTIONAL

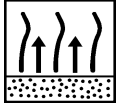
30 – 45 PSI / 200-300 KPA

NUMBER OF COATS & FLASH OFF



Standard mode

Apply 2 full wet coats (50-60um)



Flash between coats

5 mins

Flash off before bake or IR

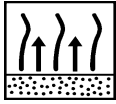
none required, but not more that 5 minutes

NUMBER OF COATS & FLASH OFF



Express mode, single visit

Apply 1 medium & 1 full wet coat (50-60µm)
Coat 1 should be applied to complete area
before 2nd coat is applied



Flash between coats

Less than 3 panels 2-3 minutes

Flash off before bake or IR

more than 3 panels no flash required
none required, but not more that 5 minutes

CURING GUIDE

Through dry at 60°C*

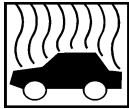
15 minutes LVH-320 and LVT-444

25 minutes with LVH-320 and LVT-4XX

Through dry with IR
(medium wave)

8-15 minutes (dependant on colour)

Metal temperature 90°C-100°C



Bake times are quoted at metal temperature. Additional time may be required if the metal is slow to reach the recommended temperature.

Important curing notes:

UHS clearcoats cure in a different manner than conventional MS or HS clears. This is normally noticed immediately after bake. UHS clears can feel soft and may finger print up to 1 hour after bake. THIS IS NORMAL. Finger prints and even masking tape marks will disappear within minutes of being marked. Vehicles may be assembled and polished as if using conventional clears as this will not effect the service time in any way.

OVERCOAT / RECOAT TIME



Sanding

Essential before recoating to ensure good adhesion

P500 (dry)

OVERCOAT / RECOAT TIME

- Force dry 60°C or IR

After cooling

- Air dry at 20°C

Minimum 12 hours



POLISHING

If polishing is required, i.e. to remove dirt nibs, it is recommended that it is carried out between 1 hour and 24 hours after the quoted drying time.

Denib with P1200, followed by P1500 dry disc.

Dampen an Abralon 3000 disc or similar with clean water ensuring that the P1500 scratches are eliminated.

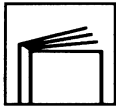
It is important to polish at minimum speed, to avoid the surface becoming too hot.

If necessary, allow the panel to cool down before to polish.

EQUIPMENT CLEANING

After use, clean all equipment thoroughly with cleaning solvent or thinner.

HEALTH AND SAFETY



Please refer to Material Safety Data Sheets for full Health and Safety details and product can labels.

Global Hardeners and activated En-V Performance Clearcoat contain isocyanate and therefore particular safety precautions must be taken.

Goggles must be worn when mixing and using to prevent accidental splashing into the eye. If contact occurs with eyes give prolonged irrigation with water and get medical attention immediately.

Good ventilation and extraction must be provided in the working environment.

Wear suitable protective equipment to prevent skin contact with this material.

When spraying this product the operator (and persons in vicinity) must wear suitable air-fed breathing apparatus.

Do not smoke whilst using this material.

This product is for professional use only.
The information given in this sheet is for guidance only. Any person using the product without first making further inquiries as to the suitability of the product for the intended purpose does so at his own risk and we can accept no liability for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of such use. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development. Drying times quoted are average times at 20°C/68°F. Film thickness, humidity and shop temperature can all affect drying times.



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