

# Technical Data Sheet.



## Permasolid® HS Diamond Clear Coat 8450 .

Permasolid® HS Diamond Clear Coat 8450 is a VOC-compliant High Solid clear coat.

It is used to repair vehicles which in production line are coated with clear coats of higher scratch resistance.

- high mechanical and chemical resistance
- easy to use
- durable gloss
- very good polishing properties

For professional use only!

VR Technical Data Sheet No. EN / 8450 / 03

## Substrate.

Suitable substrates:

Permahyd® Base Coat 280, 285, 286  
 Permahyd® Hi-TEC Base Coat 480  
 (see VR Technical Data Sheet No. 0280, 0285, 0286, 480.0, 480.1)

## Application.

Mixing ratio:



3:1 by volume with  
 Permasolid® VHS Hardener 3225  
 Permasolid® VHS Hardener 3240 extra slow \*

Pot life:

Ready for use 80 - 100 minutes at +20°C.  
 (depending on hardeners used)

Method of application:



Compliant

HVLP

Application viscosity  
 4 mm, +20°C, DIN 53211:



mixing viscosity

Spray nozzle\*\*:

1.2 - 1.3 mm

1.3 - 1.4 mm

Spray pressure\*\*:

2 - 2.5 bar

-

Atomising pressure\*\*:

-

0.7 bar

Number of coats\*\*\*:



1.5 coats

Recommended film thickness:

45 - 55 µm dry film thickness

## Drying.

Air drying:



At +20°C ambient temperature:

dust dry:

70 - 80 minutes

dry for assembly:

4 - 6 hours

dry:

overnight

\* Meets the specifications of the automotive industry, e.g. Mercedes Benz

\*\* See manufacturer's instructions!

\*\*\* When applying this clear coat, the first half coat should be a light coat forming an opaque film. A full coat should then follow directly.

Force drying:



Flash-off time:

5 - 15 minutes



Drying time at +60 - 65°C  
metal temperature:

30 - 35 minutes

Infrared drying:



Flash-off time:

5 - 15 minutes



short wave:

8 - 12 minutes

Special note:

Do not mix Permasolid® HS Diamond Clear Coat 8450 with Permasolid® Elastic Additive 9050 or Permasolid® Matting Component MA 110, as this may have negative effects on the scratch resistance of the clear coat.

## Blending / Polishing

**On original finishes of higher scratch resistance  
(e.g. Mercedes Benz/PSA)**

Special notes:

Do not blend areas which are directly visible  
(no horizontal areas such as hood or roof etc.).

Pretreatment:



Sand the total fade out area carefully with a dual action sander with 3M Trizact Fine Finishing Disc P3000 3M 50076 150 mm (optional for small areas with 75mm disc).

Before spraying, small dust inclusions may be sanded with Trizact microfine sanding disc.

Coating:

Mix Permasolid® HS Diamond Clear Coat 8450 according to TDS.

a) Spray the repair area with ready-for-use clear coat

b) Fade out neat Permacron® Speed Blender 1036 into the adjacent old paintwork. Remain inside the sanded area!

Drying:



Low bake for 30 - 35 minutes at +60 - 65°C metal temperature.



Followed by at least 12 minutes IR drying (short wave) at 100%.

## Further steps.

After cooling  
1 - 3 hours:

Sand the entire area with random orbital sander and 3M Trizact P3000 Fine Finishing Disc 50076 150 mm. Pay special attention to the fade-out area (see "clear coat" b).

Level the transition visible after sanding with 3M Perfect-it III Extra Fine Compound 80349. Adequate sanding must be guaranteed.

Polishing:



a) Polish using a polishing machine (medium speed) and 3M Buffing Pad 01927. Pour a little 3M Perfect-it III Extra Fine Compound 80349 onto the buffing pad. Follow the direction of rotation of the machine, and do not polish against the edge.

b) Polish again (medium to high speed) using 3M Polishing Foam orange 2362 [for better cooling]. Pour a little 3M Perfect-it III Extra Fine Compound 80349 onto the polishing foam.



c) Wipe off any wax and oil with 3M Finish Control Spray 55535 or silicone remover 7010 to find out if it is necessary to work on the surface again.\*

d) To seal the cleaned area, polish again using a random orbital polishing machine and 3M Polishing Foam orange 2362. Pour a little 3M Perfect-it III Extra Fine Compound 80349 onto the polishing foam.

If the finish is still not satisfactory, the entire polishing process may be repeated if necessary.

Note on safety:



This product is classified according to regulation (EC) 1272/2008 (CLP).

Please consult the Safety Data Sheet.

It is strongly recommended to use appropriate personal protection equipment during application.

Data.

Flash point:

above +23°C

\* Other polishing compounds or products from other manufacturers of polishing compounds may also be used. Please observe their instructions.

**VOC content:**  
2004/42/IIB(d)(420)420

The EU limit value for this product (product category IIB.d) in ready to use form is max. 420 g/litre of VOC.

The VOC content of this product in ready to use form is max. 420 g/l.

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