



Technical Data Sheet.

Permasolid® HS Diamond Clear Coat 8450



Special scratch resistant 2K HS clearcoat

Permasolid HS Diamond Clear Coat 8450 is a high-quality 2K high solids clearcoat. It is used for refinishing vehicles that are coated with OEM clear coats that offer greater scratch resistance.

- Demonstrates high mechanical and chemical resistance.
- Is easy to use.
- Produces a finish with a lasting gloss.

For professional use only!

Spies Hecker simply closer.



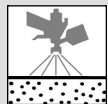
An Axalta Coating Systems Brand

Permasolid® HS Diamond Clear Coat 8450

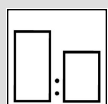
Product preparation - application STANDARD VHS



It is strongly recommended to use appropriate personal protection equipment during application to avoid respiratory, skin and eye irritation.



Permahyd Hi-TEC Base Coat 480 / Permahyd Base Coat 280/285: Surfaces must be dried / flashed-off in accordance with TDS before application
Existing finishes: Surfaces must be sanded and degreased before application



Clearcoat		Hardener	
Volume	Weight	Volume	Weight
3	100	1	37
8450		3225 3240 EXTRA SLOW *	

* OEM Approval System



Pot life at 20°C: 1 hr 20 min - 1 hr 40 min



	Spray nozzle	Spray pressure	
Compliant	1.3 - 1.4	1.8 - 2.2 bar	inlet pressure
HVLP	1.3 - 1.4	0.7 bar	atomisation pressure

see manufacturer's instructions



0.5 + 1
1 operation
1st: thin and closed
2nd: normal

with intermediate flash-off: 0 min - 2 min
final flash-off: 5 min - 10 min



	3225	3240
20 °C	12 hr - 16 hr	12 hr - 16 hr
60 - 65 °C	25 min - 30 min	30 min - 35 min



Guideline for short wave IR equipment
Half power: 5 min
Full power: 10 - 15 min

VOC compliant

2004/42/IIB(d)(420) 420: The EU limit value for this product (product category: IIB(d)) in ready to use form is maximum 420 g/l of VOC. The VOC content of this product in ready to use form is maximum 420 g/l.

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Products

Permasolid® HS Diamond Clear Coat 8450

Permasolid® VHS Hardener 3225

Permasolid® VHS Hardener 3240 extra slow

Product mix



Mixing ratios with special agents are available in the productmix table on Phoenix and in the specific TDS.

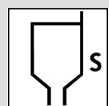
The choice of hardener and Reducer should be made according to application temperature and size of repair.

3225

Medium hardener for panel and multi panel repairs. Providing excellent through curing and recommended at temperature range of 20-25°C.

3240

Extra slow hardener for horizontal application and multiple panels up to full resprays. Ensures very good overspray absorption and application properties. Mainly to be used at temperature range of 25-40°C.



ISO 4: 41 - 49 s at 20°C
DIN 4: 17 - 19 s at 20°C



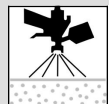
45 - 55 µm

Theoretical coverage

485 - 490 m²/l at 1 micron dry film thickness

Due to different hardener characteristics and different mixing ratios of the ready-to-use mixture in some TDS versions, the theoretical coverage calculation may vary.

Note: The practical material consumption depends on several factors, e.g. geometry of the object, surface formation, application method, spray gun setting, inlet pressure, etc.



Permasolid® HS Diamond Clear Coat 8450 can be overcoated with itself within 24 hours, without intermediate sanding



Clean after use with a suitable solventbased guncleaner.

Remarks

- Material has to be at room temperature (18-25°C) before use.
- Allow additional time for preheating up to panel temperature.
- Surplus ready for use material should not be returned to original can.
- Close can of hardener tightly immediately after use, as this product will react with humid air and water and lose its hardening effect.
- 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.
- In countries without VOC legislation Permacron Base Coat 293/295/297 can be used as well.

Permasolid® HS Diamond Clear Coat 8450

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 a fine finishing disc, e.g. 3M Trizact Fine 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%.

After cooling 1 – 3 hours:

Sand the entire area with random orbital sander and fine finishing disc, e.g. 3M Trizact P3000 Art.50076. Pay special attention to the fade out area (see "clear coat" b).

Level the transition visible after sanding with a medium or fast cut polish compound, e.g. 3M 80349 Extra fine plus, resp. 3M Fast cut Plus 50417, or Farecla G3 Ultra. Adequate sanding must be guaranteed.

Polishing:

a) Polish using a polishing machine (medium speed) and a small amount of polish compound on the recommended foam pad (see polish brand recommendations). For example: use 3M 50417 with foam pad 50487 (green), for best performance don't mix up several polish systems / brands. Follow the direction of rotation of the machine, and do not polish against the edge.

b) If necessary to remove a haze from the surface, polish again (medium to high speed) using a finer compound e.g. 3M Perfect-it III Extra Fine Plus Compound 80349 with matching orange foam pad

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 remove swirls, and for surface protection, polish again using a (random) polishing machine and a fine polish compound like 3M 50383 Anti Hologram, or Farecla G3 fine. Use the matching soft foam pad.

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

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

Consult Safety Data Sheet prior to use. Observe the precautionary notices displayed on the container.

All other products referred to in the refinish build up are from our Spies Hecker product range. System properties will not be valid when the related material is used in combination with any other materials or additives which are not part of our Spies Hecker product range, unless explicitly indicated otherwise.

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