

## Technical Data Sheet.

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# Permasolid® HS Optimum Plus Clear Coat 8650



**Fast-drying clear coat for efficient application in the Hi-TEC Performance and Classic Systems**

Permasolid HS Optimum Plus Clear Coat 8650 is a high-quality, fast-drying 2K High Solids clear coat for all panel and overall repairs.

- Offers optimal application even under unfavourable spray booth conditions such as low drying temperatures.
- Enables flexible and productive application.
- Offers very short drying times.
- Can be polished easily and after a short time.
- Can be used in combination with Permasolid HS Accelerator 9025 / Permasolid Additive 9026 for Speed Repair.

For professional use only!

Spies Hecker simply closer.



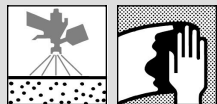
An Axalta Coating Systems Brand

# Permasolid® HS Optimum Plus Clear Coat 8650

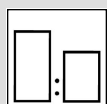
## Product preparation - application STANDARD - VHS



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		Reducer	
Volume	Weight	Volume	Weight	Volume	Weight
3	100	1	36	10 %	11
8650		3220 FAST 3225 3230 SLOW 3240 EXTRA SLOW		3380 3385 SLOW	



Pot life at 20°C: 45 min - 1 hr



	Spray nozzle	Spray pressure	
<b>Compliant</b>	1.3 - 1.4	1.8 - 2.2 bar	inlet pressure
<b>HVLP</b>	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



	3220/3225/3230/3240
<b>20 °C</b>	12 hr - 16 hr
<b>60 - 65 °C</b>	15 min - 30 min



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

VOC compliant

2004/42/IIB(d)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 Optimum Plus Clear Coat 8650

Permasolid® VHS Hardener 3220 fast  
 Permasolid® VHS Hardener 3225  
 Permasolid® VHS Hardener 3230 slow  
 Permasolid® VHS Hardener 3240 extra slow

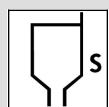
Permacron® Reducer 3380  
 Permacron® Reducer 3385 slow

## Product mix

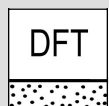


Mixing ratios with special agents are available in the productmix table on Phoenix and in the specific TDS. The choice of hardener and Reducer should be made according to application temperature and size of repair.

3220	Accelerated fast hardener for Speed Repair and panel repairs. Mainly used at temperature range of 15 - 20°C.
3225	Medium hardener for panel and multi panel repairs. Providing excellent through curing and recommended at temperature range of 20-25°C.
3230	Slow hardener suitable for horizontal applications and multiple up to full resprays mainly at temperature range of 20-30°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.
3380	Medium thinner suitable for panel, multi panel and large size repairs. Mainly used at temperature range of 15-30°C.
3385	Slow thinner for multiple panels up to full resprays. Mainly to be used at higher temperatures of 30-40°C.



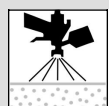
ISO 4: 49 - 61 s at 20°C  
 DIN 4: 19 - 22 s at 20°C



50 - 60 µm

## Theoretical coverage

475 - 480 m<sup>2</sup>/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 Optimum Plus Clear Coat 8650 can be overcoated with itself within 24 hours, without intermediate sanding

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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.
- 15% Permasolid Elastic Additive 9050 can be added to the Clearcoat. Hardener and reducer ratios are unchanged.
- 3380/3385: When this clear coat is used to repair smallest damages (speed repair method), 10% Permasolid Reducer 3380/3385 may be replaced by 10% Permasolid HS Accelerator 9025 or Permasolid Additive 9026. Attention: The mixing described here for speed repair applications must not be used on horizontal surfaces.

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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