Technical Data Sheet.

Permasolid® HS Hardener

3307 extra fast 3309 fast 3310 3312 slow 3315 extra slow

Permasolid® HS hardeners are the hardeners specially developed for our High-Solid products.

Their high solids content allows for economical and eco-friendly application.

Having five versions means that all painting conditions can be optimally catered for and highly reliable application is guaranteed.

For professional use only! VR Technical Data Sheet No. 3307_3315/03/2007-GB





Application. Possible base materials: Permasolid® HS Premium Surfacer 5310 Permasolid® HS Express Surfacer 5250 Permasolid® HS SpectroFlex 5400 Permasolid® HS Vario Surfacer 8590 Permasolid® HS Non-Sanding Surfacer 5330 Permasolid® HS Clear Coat 8030 Permasolid® HS Clear Coat 8035 1 Permasolid® HS Hardener 3307 extra fast Field of application: Suitable for spot repairs and partial refinishes at low temperatures. 2 Permasolid® HS Hardener 3309 fast Suitable for partial refinishes at low temperatures and low volumes of outgoing air in the spray booth. 3 Permasolid® HS Hardener 3310 Suitable for full and partial refinishes at normal temperatures. 4 Permasolid® HS Hardener 3312 slow Suitable for full and partial refinishes, even at high temperatures. 5 Permasolid® HS Hardener 3315 extra slow Suitable for full and partial refinishes, even at very high temperatures. Finishes applied using this hardener are characterised by excellent gloss and flow. Mixing ratio: See Technical Data Sheet of the respective base material.

Selection of hardeners	HS Hardener 3307 extra fast	HS Hardener 3309 fast
Full or partial refinish		
(large objects)		_
Partial refinish	+ +	+ +
(spot repairs)	T T	T T
High temperature		
above +25°C		
Very high temperature		
+30°C to +35°C		
Normal temperature		_
+20°C to +25°C		
Low temperature	++	+
+15°C to +20°C		
Low baking	+	+
Air drying	+ +	+ +

Selection of hardeners	HS Hardener 3310	HS Hardener 3312 slow	HS Hardener 3315 extra slow
Full or partial refinish (large objects)	+	+ +	+ +
Partial refinish (spot repairs)	+	+	
High temperature above +25°C	+	+	+ +
Very high temperature +30°C to +35°C	-	+	+ +
Normal temperature +20°C to +25°C	+ +	+ +	+
Low temperature +15°C to +20°C	-	-	
Low baking	++	++	++
Air drying	++	+	+

+ + ideal + suitable

- not particularly suitable - - unsuitable

ata.		
	HS Hardener 3307 extra fast	HS Hardenel 3309 fast
Specific weight: Flash point:	0.98 g/cm³ below +21°C	1.00 g/cm³ above +23°C
	HS Hardener 3310	HS Hardenel 3312 slow
Specific weight: Flash point:	0.99 g/cm³ above +23°C	1.00 g/cm³ above +23°C
	HS Hardener 3315 extra slow	
Specific weight: Flash point:	1.01 g/cm³ above +23°C	

Storage.

Guaranteed shelf life:

6 months in sealed original containers

Storage conditions:



Do not store in damp conditions.



After use, replace container lid immediately, ensuring an airtight seal.

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The relevant Material Safety Data Sheet and Warnings displayed on the product label need to be observed.

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