

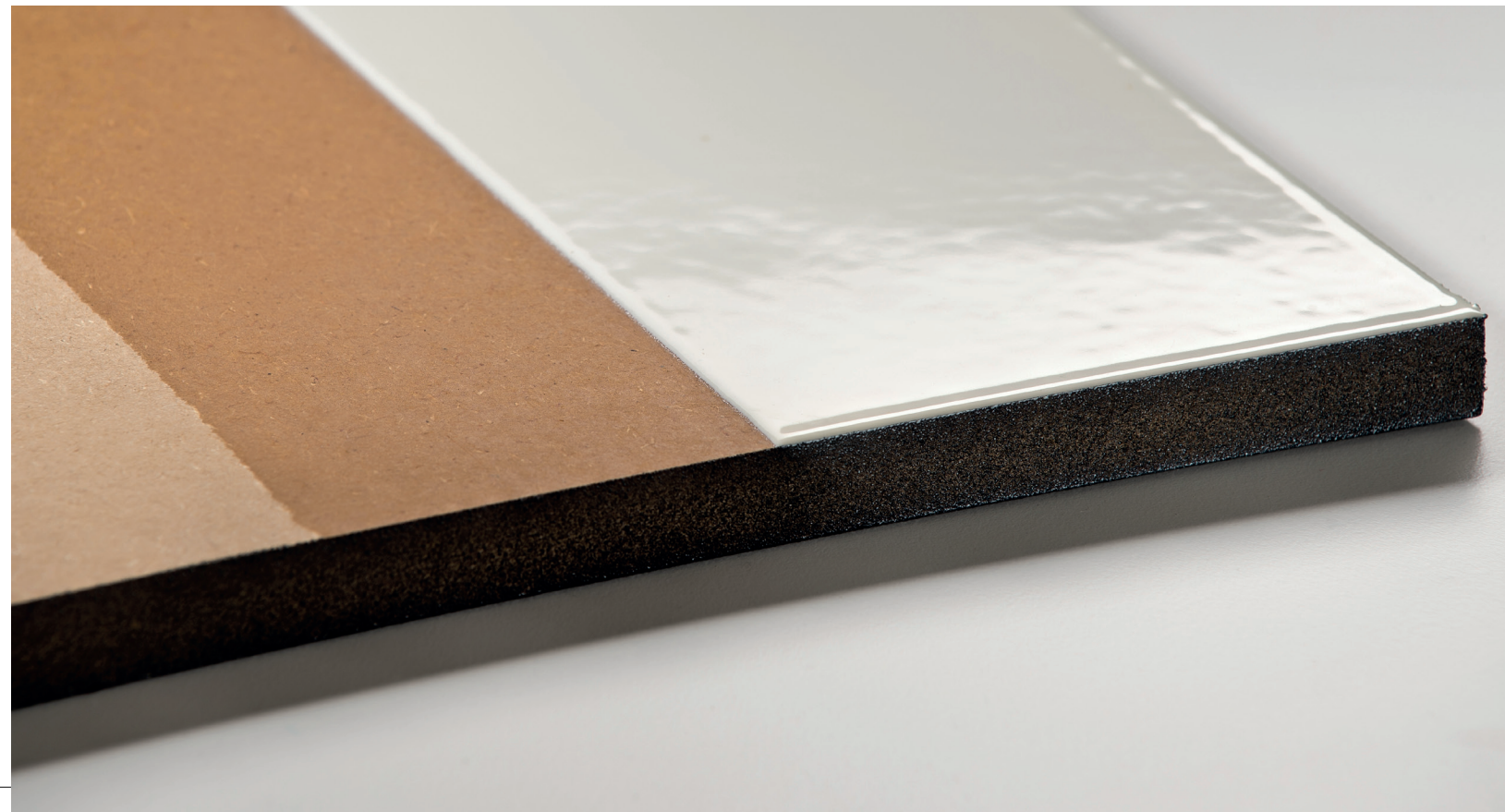
One-component systems based on SUPRASEC® 2413 / SUPRASEC® 2416 / SUPRASEC® 2451 MDI

SUPRASEC® 2413 and SUPRASEC® 2416 primers have fast-curing properties, even at lower temperatures. Their low viscosities allow an excellent penetration in porous substrates such as concrete. They also have film-forming characteristics that enable use as a membrane coating. Typically, one layer will seal the substrate, but for highly porous substrates or to make the substrate damp proof, two or three layers are recommended. Foaming problems can be avoided by not exceeding the advised coverage rate of max. 0.150 kg/m² for each applied layer.

SUPRASEC® 2451 flexible primer technology is designed for use in a one-component system and displays a good wetting of a broad range of materials to offer a single solution for different substrates. This primer can accommodate expansion and shrinkage changes that occur following variations in temperature, substrate moisture or load. Typical application areas include loading docks and industrial flooring (concrete-steel) and concrete-asphalt overlap zones. Longer overcoat times on non-porous substrates (e.g. steel) can be shortened by catalysis.

Two-component systems based on SUPRASEC® 9584

SUPRASEC® 9584 primer technology is designed for use in a two-component system and is formulated to react with modified castor oils (Albodur types, Alberdingk-Boley) on a one-to-one volume ratio. Work time and cure time can be easily adjusted by catalysis of the resin blend. Its extremely low viscosity also allows deep penetration into porous substrates, resulting in strengthening by chemical crosslinking. A two-component system based on SUPRASEC® 9584 technology can be applied in industrial flooring, concrete, steel and wood priming. The system has shown excellent adhesion to a variety of substrates under severe conditions (e.g. damp concrete).



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SUPRASEC® MDI-based PRIMERS

One- or two-component solutions for your coatings needs



INTRODUCTION

Huntsman SUPRASEC® MDI-based primers offer two high-performance solutions for your coatings needs. As one of the world's leading producers of modified diphenylmethane diisocyanate (MDI), Huntsman offers MDI-based polyurethane primers that can be used as a one-component moisture cure and a two-component primer. Primarily developed for priming porous substrates, such as concrete and wood, SUPRASEC® MDI-based primers also can be applied for non-porous substrates, such as steel, asphalt, ceramics and rubber. They ensure an excellent adhesion to the substrate in preparation for a newly applied flooring/coating/protective system. The primers, which are 100% solids, eliminate volatile organic compound (VOC) emissions, therefore addressing VOC regulations.

Huntsman SUPRASEC® MDI-based primers are available for use in a wide variety of applications, including polyurethane floor coatings for industrial- or sport floors and car park decks. They can also be used in combination with polyurea coatings for bridge decks, roof membranes, asphalt and concrete priming. Overall, these technologies aid in the preservation and re-habilitation of existing structures, prolonging the lifetime of concrete and metal products.

GENERAL PROPERTIES	Units	SUPRASEC® 2413	SUPRASEC® 2416	SUPRASEC® 2451	SUPRASEC® 9584 ***
Colour		Light brown	Light brown	Light brown	Light brown
NCO	%	24	24	12	24
Viscosity	mPas at 25°C	185	185	425	85
Specific gravity	g/ml	1.17	1.17	1.16	1.20
Solids content	%	100	100	100	100
Open time (20 °C 50% RH)*	hr min	30 min	5 min	8 hr	2 hr 30 min
End of Cure (20 °C 50% RH)*	hr min	3 hr 30 min	1 hr	11 hr 30 min	3 hr 30 min
WVT **	g/day/m²	NA	20	16	15

* Measured on glass with BK dry time recorder ** Measured at 0.15 mm film thickness *** Versus ALBODUR® 912

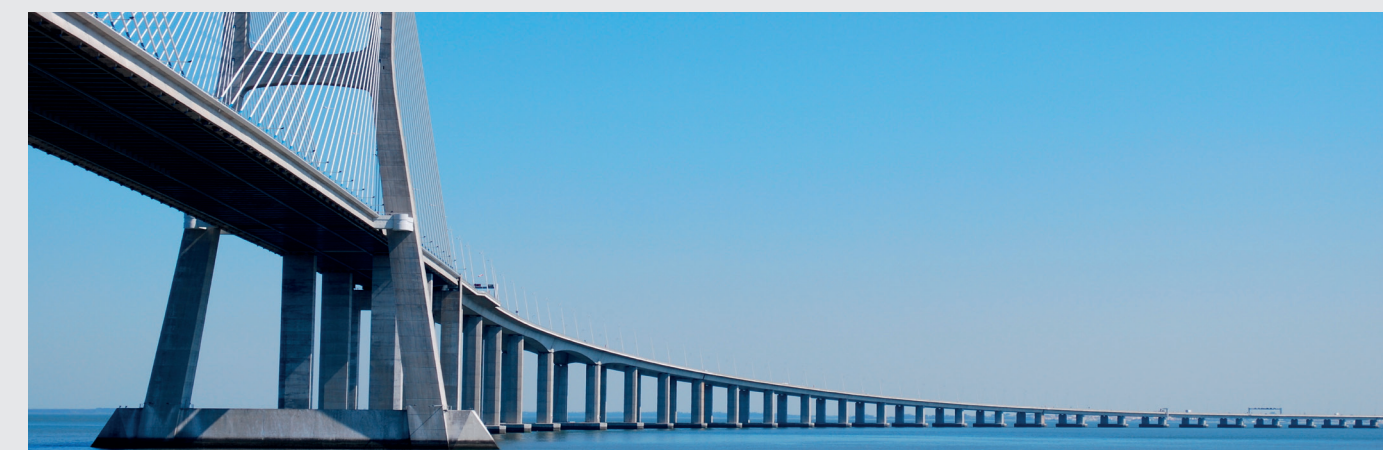
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APPLICATION

Huntsman SUPRASEC® MDI-based primers are easy to apply and offer versatility and flexibility in applications. Prior to application, the surface must be clean and free from dirt, grease and dust. The primer can be applied straight from the container by brush or roller. The product should be applied in an even and uniform manner, making sure recesses and edges are thoroughly coated/primed. Do not apply if the relative humidity exceeds 85%.

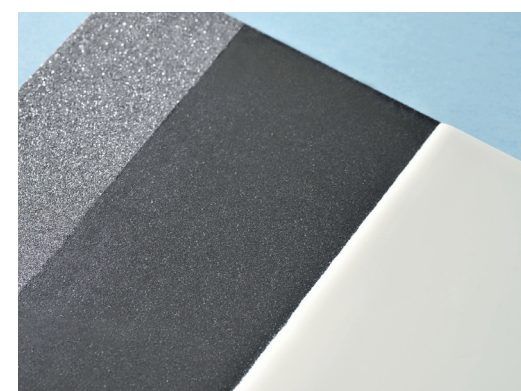
KEY BENEFITS:

- EXCELLENT ADHESION TO A VARIETY OF SUBSTRATES
- 100% SOLIDS, ELIMINATING VOC EMISSIONS
- FAST APPLICATION TIME AND RECOAT WINDOW
- EASY APPLICATION DUE TO LOW VISCOSITY, RESULTING IN LOWER CONSUMPTION
- PRESERVATION AND RE-HABILITATION OF EXISTING STRUCTURES TO PROLONG THE LIFE OF CONCRETE, METAL AND WOOD PRODUCTS

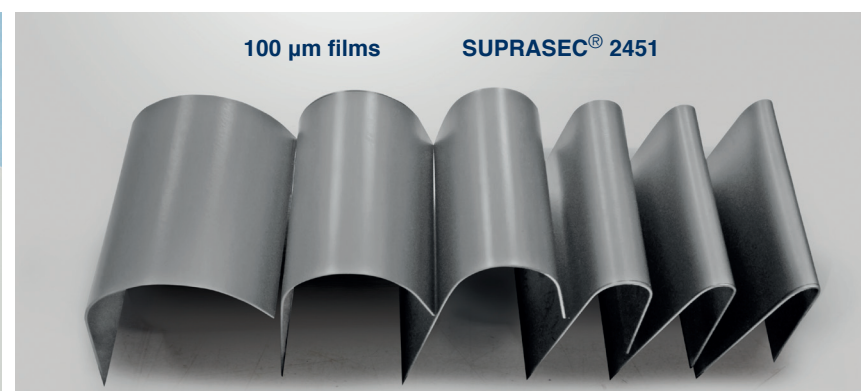


STEEL SUBSTRATE	Units	SUPRASEC® 2413	SUPRASEC® 2416	SUPRASEC® 2451	SUPRASEC® 9584 (*)	
Recommended Overcoat Window @ 20 °C Minimum	hrs	2	0.5	16	0.5	PU top coat
Recommended Overcoat Window @ 20 °C Maximum	hrs	168	3	168	168	
Pull Off Adhesion Value	MPa	≥ 7.5	≥ 7.5	≥ 10	≥ 14	
Recommended Coverage Rate	kg/m²	0.05 - 0.15	0.05 - 0.15	0.05 - 0.15	0.05 - 0.10	
Recommended Overcoat Window @ 20 °C Minimum	hrs	1	0.5	8	0.5	PUA top coat
Recommended Overcoat Window @ 20 °C Maximum	hrs	24	8	48	48	
Pull Off Adhesion Value	MPa	≥ 15	≥ 15	≥ 15	≥ 15	
Recommended Coverage Rate	kg/m²	0.10 - 0.15	0.10 - 0.15	0.10 - 0.15	0.05 - 0.15	
Mandrell Bending Test	mm	> 32	> 32	≤ 3	≤ 3	

* Versus ALBODUR® 912
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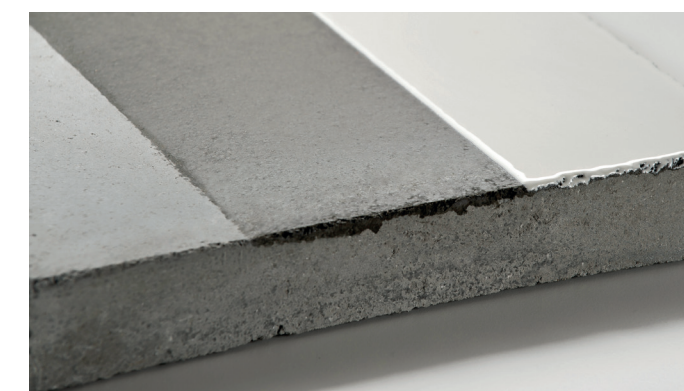
Steel Substrate



In cylindrical bend trials, SUPRASEC® 2451 technology fully retained flexibility after cure with no signs of cracking, pinholes or delamination, even at the extreme low end of the test diameters.

CONCRETE SUBSTRATE	Units	SUPRASEC® 2413	SUPRASEC® 2416	SUPRASEC® 2451	SUPRASEC® 9584 (*)	
Recommended Overcoat Window @ 20 °C Minimum	hrs	3	1	16	2	PU top coat
Recommended Overcoat Window @ 20 °C Maximum	hrs	168	168	168	168	
Pull Off Adhesion Value	MPa	≥ 4.0	≥ 4.0	≥ 4.0	≥ 4.0	
Mode Of Failure		Concrete	Concrete	Concrete	Concrete	
Recommended Coverage Rate	kg/m²	0.15	0.15	0.15	0.15	
Recommended Overcoat Window @ 20 °C Minimum	hrs	2	0.5	0.5	0.5	PUA top coat
Recommended Overcoat Window @ 20 °C Maximum	hrs	72	48	48	168	
Pull Off Adhesion Value	MPa	≥ 4.0	≥ 4.0	≥ 4.0	≥ 4.0	
Mode Of Failure		Concrete	Concrete	Concrete	Concrete	
Recommended Coverage Rate	kg/m²	0.15	0.15	0.15	0.15	

* Versus ALBODUR® 912
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Concrete Substrate



Mode Of failure demonstrates a full concrete failure