



DELTAShield C 1100

HIGH PERFORMANCE, HIGH GLOSS, RAPID CURING POLYASPARTIC TECHNOLOGY

DESCRIPTION

DELTAShield C 1100 is a new technology high performance, rapid curing colour fast and non-yellowing waterproofing & corrosion protection coating. **DELTAShield C 1100** can provide significant savings in application and re-use times due to it being a one application, rapid curing product. There is no need for a topcoat due to **DELTAShield C 1100** excellent colour and gloss retention even under harsh UV exposure.

DELTAShield C 1100 displays excellent chemical resistance and is resistant to most fuels, oils, solvents and cleaners making it an ideal solution for plant and equipment corrosion protection. **DELTAShield C 1100** can be applied using an airless sprayer or rollers. With a tack free time of 45 minutes re-use times are incredibly short saving customers costly down time.

FEATURES

- ✓ One product, one application.
- ✓ Extremely fast cure and re-use times
- ✓ Excellent colour and gloss retention. Does not yellow under UV light
- ✓ Excellent abrasion resistance
- ✓ Excellent chemical resistance
- ✓ Very good flexibility – reduces impact damage.
- ✓ Resistant to most fuels, oils, solvents, acids and caustics
- ✓ Can be used for indoor and outdoor applications
- ✓ Suitable for vertical and horizontal applications.
- ✓ Displays good flexibility and impact resistance compared to standard epoxies.
- ✓ Provides high performance corrosion protection with colour and gloss stability in one rapid curing, flexible product.

TYPICAL USES

- ✓ Steel corrosion protection replacing multi layered multi product systems
- ✓ Concrete façade protection system.
- ✓ Protection of concrete bridge structures
- ✓ Earthmoving equipment
- ✓ Tanks – Internal and external
- ✓ Water features & swimming pools as a water proof protective coating
- ✓ Pipe coatings - external
- ✓ External coating of bulk rail wagons
- ✓ Industrial plant coatings.
- ✓ External protection of bins, hoppers, silos.
- ✓ Can be applied as a UV and color stable top coat on top of any DELTAShield range of polyurea systems





PRODUCT INFORMATION

PROCESSING PROPERTIES	DATA
Mixing ratio of Comp. A to Comp. B	1:1 by volume
Material consumption - approximate L / m ²	0.125ml @ 125 µm
Recommended thickness [µm]	125 - 500
Recommended layer thickness [µm]	Up to 500
Pot life at 20°C [minutes]	45 - 60
Tack free time @ 20°C, 57% humidity [minutes]	45 - 60
Handling time [h]	Light use: 1 – 1 ½ Heavy use: 4
Full Cure (Normal loading) [h]	10 - 12
Temperature range for application (ambience) [°C]	+5 - +50
Temperature range for application (substrate) [°C]	+5 - +50
Over coat window (h)	8

PHYSICAL PROPERTIES	DATA	
Chemical Base	-	Polyaspartic / Polyurea technology
Solids content [%]	DIN EN ISO 3251	97
Viscosity [mPa*s] @ 25°C	DIN EN ISO 3219 / A3	Comp. A: 100 Comp. B: 1940 Mix: approx. 570
Density [g/cm ³] @ 20°C	DIN EN ISO 2811-1 / ASTM D-1217	Comp. A: 1.18 – 1,22 Comp. B: 1.07 – 1.11 Mix: 1.15
Density [g/cm ³]	EN ISO 1183 / ASTM D-792	1.23 ± 0.02
Tensile strength [Mpa]	ISO 37-2005 / ASTM D-638	≥ 16



PHYSICAL PROPERTIES	DATA	
Elongation at tear [%]	ISO 37-2005 / ASTM D-638	≥ 195
Hardness [Shore D]	ISO 868-2003 / ASTM D-2240	68
Rebound resilience [%]	ISO 4662 / ASTM	≥ 5
Taber Abrasion [mg]	ASTM D-4060	< 30 (Wheel CS17 / 1.000g / 1000 cycles)
Colour fastness	DIN EN ISO 105-B06	No chalking, no dis-colouration, no cracking and no blistering.
Colour fastness	ASTM G154a / ISO 4892	After approx. 500 hours: No chalking, no dis-colouration, no cracking and no blistering.
Liquid Impingement Erosion Test conditions: Water jet 135m/s	ASTM G-73-10	Wear resistant up to 240 min. against liquid impingement erosion
Max. Process temp. [°C]	ISO 11346 / ASTM D-2485	Wet: 60 Dry: -20 to +120 Peak temperature dry: 140
Storage conditions [°C]	DIN EN 12701 / ASTM	10 – 30 (in closed original drums, stored at dry and well-ventilated place. Avoid freezing)
Shelf life	-	Approximately 12 months





APPLICATION NOTES

The B-side component should always be thoroughly power stirred prior to use. For coloured applications add DELTA Pigment to the B-side component only at a rate of 15% by volume. Power stir thoroughly before combining the A and B components.

Combine the A side and B-side components and power stir again before applying to substrate.

The mixing ratio of comp A to comp B is 1:1 by volume. To ensure full physical characteristics are achieved within the finished coating use graduated beakers / containers to ensure accurate 1:1 by volume mixing of component A and component B.

DELTAShield C 1100 can be applied by airless spray gun or with short haired rollers. DELTA recommends application by airless sprayer.

In the event **DELTAShield C 1100** is to be pigmented in a very light colour be aware that additional coats may be necessary to achieve the required hiding power. When using very light colours such as light grey or white the pigment loading can be increased by an additional 5% (to 20%) by volume of the B-side component.

Take note that the tack free and curing times of **DELTAShield C 1100** are influenced by the environmental conditions at the time of the application. Heat and humidity will accelerate the reactivity and curing of the **DELTAShield C 1100**. In hot and humid environments only mix small amounts of product at a time to enable full application of mixed product. In cold environments the tack free and cure times can be extended considerably especially in environments less than 10°C.

PACKAGING

DELTAShield C 1100 is supplied in 5 or 20 kg packaging for each component.

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own investigations and testing, the suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. Due to the large number of variables that can affect the product and the application process that are out of the control of DELTA Coatings International LLC no warranty of any kind, express or implied is given. The liability of DELTA Coatings International LLC for any claims is limited to the purchase value of the material.

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