

Product Description

Crystic® TC 507 PA is a pre-accelerated IsoNPG topcoat formulated for application by brush or roller. It has excellent resistance to water, UV and many chemical environments. The viscosity profile ensures even coverage with minimal sagging and excellent opacity. Crystic® TC 507 PA is recommended for use as a finishing coat for GRP lined swimming pools, or any other application where the back of the laminate needs to be protected from water or mild chemical attack.

The information contained in this technical data sheet applies to all colours.

Features and Benefits

Features	Benefits
IsoNPG base resin	Outstanding water and weathering resistance.
Easy to apply	Excellent surface finish

Brush Application

Do	Don't
Ensure the topcoat has attained workshop temperature of 18°C - 25°C before use.	Stir the topcoat with high shear mixers as this will temporarily break down the thixotropy leading to drainage.
Add 1% - 2% medium reactivity MEKP catalyst.	Exceed a wet film thickness of 800 microns as thick films encourage air retention.
Gently stir the topcoat by hand or low shear stirrer.	Apply as an in-mould gelcoat as there will be poor adhesion to any subsequent lamination.
Use long brush strokes and even pressure to apply the topcoat in an even film across the laminate surface.	Apply on a dirty surface as this will result in poor adhesion between topcoat and laminate. Substrate should be solvent wiped prior to topcoat application.
Brush through the topcoat until the recommended wet film thickness of 500-800 microns is reached.	Catalyse more topcoat than can be applied before it starts to gel as this will lead to wastage and possible exothermic reaction.
Ensure the laminate is fully cured before applying the topcoat. Laminates >1 week old may require a light abrasion to ensure good adhesion to the topcoat.	Allow vapour to be retained in deep sections as this can cause slow curing.

Additives and Variants

The information contained in this technical data sheet applies to all pigmented versions.

Incorporation of additional additives may affect the working, weathering or cured properties of the gelcoat.

Please check with Scott Bader's Technical Service department before using the gelcoat outside of specified parameters.

Post-Curing

Satisfactory laminates for many applications can be made with Crystic® TC 507 PA by curing at workshop temperature (18°C - 25°C). However, for optimum properties, laminates must be post-cured before being put into service. The moulding should be allowed to cure for 24 hours at workshop temperature and then oven-cured for 16 hours at 40°C.

Recommended Testing

It is recommended that customers test all gelcoats before use under their own conditions of application to ensure that the product meets requirements.

Typical Properties – Uncured

Property	Typical Value
Viscosity, ICI Cone & plate, 25°C	14 poise
Viscosity, Brookfield SP5 at 2.5RPM, 25°C	45,000 mPa.s
Viscosity, Brookfield SP5 at 20RPM, 25°C	10,000 mPa.s
Geltime, 2% Butanox M50, 25°C	15 minutes
Geltime, 1% Butanox M50, 25°C	25 minutes
Specific Gravity at 25°C	1.2
Stability from date of manufacture when stored in accordance with storage recommendations	5 Months

Typical Properties – Cured

Property*	Test Method	Typical Value
Barcol Hardness (Model GYZJ 934-1)	EN59	49
Water Absorption 24 hrs at 23°C	BS EN ISO 62 part 6.2	16 mg
Heat Deflection Temperature† (1.8MPa)	BS EN ISO 75-2 (1996)	96°C
Elongation at Break	BS EN ISO 527-2	1.6%
Tensile Strength	BS EN ISO 527-2	57 MPa
Tensile Modulus	BS EN ISO 527-2	3.9 GPa

* Curing Schedule – 24 hours at 20°C + 3 hours at 80°C.

† Curing Schedule – 24 hours at 20°C + 5 hours at 80°C + 3 hours at 120°C.

Packaging and Storage

Crystic® TC 507 PA is available in 25kg and 225kg containers.

Crystic® TC 507 PA should be stored between 5°C and 25°C in the original, unopened container in a dry, well ventilated place. Protect from freezing and direct sunlight. Avoid contact with oxidising agents. If stored outside of these recommendations, shelf life will be significantly reduced.

Health and Safety

Read and understand separate Safety Data Sheet before using this product.

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Group tech class: G90519

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SCOTT BADER MIDDLE EAST

Dubai, United Arab Emirates, PO Box 16785

Telephone: +971 (0) 481 50222

www.scottbader.com