

Crystic[®] Crestacoat 5000PA

A new technology Barriercoat designed to significantly improve Gelcoat surface aesthetics, creating a glassy, high lustre, ultra smooth finish.





Superior reflective surface properties of a laminate with Crystic® Crestacoat 5000PA Barriercoat.

Use it for making superior surface finish parts -

Fibre pattern and orange peel can often be seen on a gelcoat surface causing an undesirable gelcoat finish; darker colours, complex shapes and infused parts are especially prone to these defects. These common gelcoat surface defects can be dramatically reduced by applying a 1mm thick layer of Crystic[®] Crestacoat 5000PA behind the gelcoat.

Superior 'Matched System' Performance -

Crystic Crestacoat 5000PA has been matched with Crystic VE679PA skincoat to give the best possible surface finish and the added advantage of outstanding osmotic blistering resistance, proven in a rigorous 12-month test. This matched system can be used with confidence for marine applications or for parts used in other demanding environments, where surface aesthetics are critical.

Unique Formulation & Performance -

Crystic Crestacoat 5000PA is based on innovative urethane acrylate technology unique to Scott Bader. The unique formulation has been proved technically to outperform both vinylester and polyester barriercoats. Use it with the knowledge that it comes with the proven quality guarantees associated with Scott Bader.

Markets

- Marine
- Land Transport
- Building
- Industrial
- Applications that require a superior gelcoat surface finish

Crystic[®] **Crestacoat 5000PA**

Superior Surface Finish -

Wave-scan Distinctiveness of Image (DOI) measurement (appearance standard in the automotive industry) proves Crystic Crestacoat 5000PA is significantly better than both polyester and vinylester barriercoats in achieving a glassy, high definition, deep lustre gelcoat surface finish. The results achieved on the laminate built using Crestacoat 5000PA would even significantly outperform many automotive spray painted parts.

Interlaminar Adhesion -

Its tough, strong, flexible urethane acrylate resin backbone, as used in Scott Bader's Crystic Crestomer® structural adhesive range of products, ensures excellent adhesive properties within the laminate.

Use less than competitive materials -

Only 1mm thickness is required to achieve all the product advantages.

Easy to apply and use –

It can be sprayed or applied by brush and is very easy to use.

Lightweight Formulation –

This means only 600g/m² is required to achieve the recommended 1mm thickness.

Laminate Flexibility –

Improved by using Crestacoat 5000PA which helps prevent gelcoat cracking.

Features & Benefits

Low Exotherm –

This means that when applied at a thickness of 1mm, Crestacoat 5000PA can be used with confidence on very large structures.

Matched System –

Crystic Crestacoat 5000PA has been matched for use with Crystic VE679PA skincoat resulting in a system proven to give the best surface finish.

📔 Radius compound –

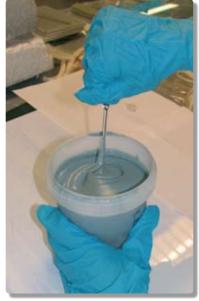
It is an ideal product for making superior quality complex parts with sharp corners, as its flexible properties reduce air voids, cracking and pre-release in moulded parts where there is sharp radius in the design.

Blistering Resistance -

A rigorous 12-month test has proven that Crystic Crestacoat 5000PA can be used with confidence in a marine environment behind a Crystic high performance marine grade gelcoat with Crystic VE679PA skincoat.

📕 Long-term surface quality –

Laminates constructed using Crystic Crestacoat 5000PA maintained a superior surface quality after being submerged in water at 40°C for 12 months, proving that it helps to maintain a high quality surface finish in the long term.



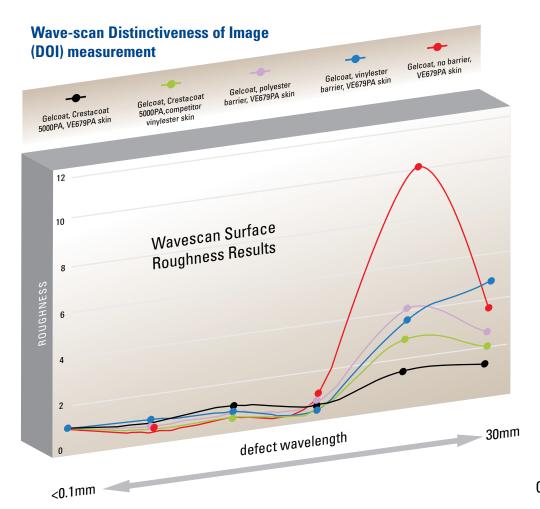
The paste is firstly catalysed and mixed thoroughly.



The Crystic Crestacoat 5000PA can then be applied by brush for smaller areas.



Or by spray to cover larger areas quickly and evenly.



Short and long wave roughness

The quality of a surface differs depending if viewed close-up or far away. Hence surface waviness, or 'orange-peel', has historically been characterised using two key criteria, namely the short and long wave roughness of a surface.

Short wave roughness is observable at close ranges, around 40cm, affected by the smoothness of reflected edges.

Long wave roughness is best observed at around 3m distance and is affected by larger defects around the 1-10mm wavelength; at this distance, a high quality surface should almost look as if it is wet. The wave-scan graph shows data comparing combinations of different gelcoats and barriercoats. Crystic Crestacoat 5000PA backed with Crystic VE679PA shows surface aesthetics superior to all other combinations. These results would even significantly outperform many spray painted parts in the automotive industry.

Crystic LS 451PA back-up resin Crystic VE679PA skincoat Crystic Crestacoat 5000PA Crystic Gelcoat

to be used behind a standard gelcoat and should be applied when the gelcoat has reached sufficient cure for normal lamination to take place. It can be brushed or sprayed to a thickness of 1mm. It is recommended that the barrier gel layer is as even as possible. As a guide, approximately 600g/m² of Crystic Crestacoat 5000PA will give the required thickness when evenly applied.

Crystic Crestacoat 5000PA is designed

Optimum	Laminate	Construction

Typical Properties					
Property	Unit	Liquid Crystic Crestacoat 5000PA			
Appearance		Light blue paste			
Viscosity @ 25 °C		Thixotropic			
Specific gravity @ 25 °C		0.6			
Stability in the dark @ 20 °C	months	3			
Geltime (@ 25 °C using 2% Catalyst M / Butanox M50®)	minutes	25			

Curing schedule – 24 hours @ 20°C, 3 hours @ 80°C

** Curing schedule – 24 hours @ 20°C, 5 hours @ 80°C, 3 hours @ 120°C

Typical Properties

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Property	Unit	Fully cured* Crystic Crestacoat 5000PA			
Shore Hardness		70			
Deflection temperature under load ** (1.80MPa)	°C	58			
Tensile Modulus	MPa	1050			
Tensile Strength	MPa	17			
Elongation at break @ 20°C	%	3.5			

Packaging

Crystic Crestacoat 5000PA is supplied in 15kg containers.

Scott Bader Composites Europe

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From Technical and Production Excellence Comes Performance Excellence.





