

Introduction

GC LS 98PA Belgrade White is a pre-accelerated gelcoat formulated for spray application. A wide range of colours is available and the information contained in this leaflet also applies to these pigmented versions.

Applications

GC LS 98PA Belgrade White is recommended for use in the marine and building industries. It is also suitable for all general moulding requirements.

Features and Benefits

GC LS 98PA Belgrade White typically contains 30-32% styrene when formulated as a pigmented gelcoat. It therefore has a lower styrene emission than standard spray gelcoats. Typically a reduction of 25% -30% can be seen in styrene emission when GC LS 98PA Belgrade White is evaluated in static and dynamic tests under both laboratory and workshop conditions.

GC LS 98PA Belgrade White has good water and weather resistance. It is low in viscosity with excellent air release properties. It achieves good coverage in thin film and does not drain on the mould.

Approvals

GC LS 98PA White is approved by Lloyd's Register of Shipping for use in the construction of craft under their survey. It is also approved by the Water Byelaws Scheme for the storage of potable water.

Formulation

GC LS 98PA Belgrade White should be allowed to attain workshop temperature (18°C-20°C) before use. Stir well by hand, or with a low shear mixer to avoid aeration, and then allow to stand to regain thixotropy. GC LS 98PA Belgrade White requires only the addition of catalyst to start the curing reaction. The recommended catalyst is Catalyst M (or Butanox M50), which should be added at 2% into the gelcoat. (Please consult our Technical Service Department if other catalysts are to be used).

Spray Application

Do

- Gently stir the gelcoat before use by hand or low shear mixer.
- Ensure the gelcoat has attained workshop temperature of 18°C-20°C before use. (Temperatures below 18°C will require higher pressure to achieve an acceptable spray pattern and this will encourage porosity).
- Spray at the minimum practical pressure whilst maintaining an acceptable spray pattern and full fan width.
- Apply a mist coat and then build up thickness in long, even passes of 0.125mm (0.005 inch) until the recommended wet film thickness of 0.5-0.625mm (0.020-0.025 inch) is reached. This will minimise porosity and colour defects.

Don't

- Stir the gelcoat with high shear mixers as this will temporarily break down the thixotropy leading to drainage.
- Exceed a wet film thickness of 0.625mm (0.025 inch) as thick films encourage air retention.
- Apply excessive thickness in corner areas as this can cause pre-release.

Additives

The addition of pigment pastes, or other additives, can adversely affect the spraying characteristics of GC LS 98PA Belgrade White. To avoid this, it is supplied in a wide range of colours, which also eliminates the potential for mixing errors. The inclusion of additives can also adversely affect the weather and water resistance of the cured gelcoat.

Typical Properties

The following tables give typical properties of GC LS 98PA Belgrade White when tested in accordance with SB, BS, BS EN or BS EN ISO test methods.

| Property | | Liquid Gelcoat |
|--|---------|----------------|
| Appearance | | White |
| Viscosity at 25°C | | thixotropic |
| Specific Gravity at 25°C | | 1.15 |
| Stability in the dark at 20°C | months | 5 |
| Gel time at 25°C using 2% Catalyst M (Butanox M50) | minutes | 15 |

| Property | | Fully cured * White Gelcoat (unfilled casting) |
|--|-----|--|
| Barcol Hardness (Model GYZJ 934-1) | | 45 |
| Water Absorption 24 hrs at 23°C | mg | 17 |
| Deflection Temperature under load † (1.80 MPa) | °C | 76 |
| Elongation at Break | % | 2.5 |
| Tensile Strength | MPa | 68 |
| Tensile Modulus | MPa | 4060 |

* Curing Schedule - 24 hrs @ 25°C, 3 hrs @ 80°C

† Curing Schedule - 24 hrs @ 25°C, 5 hrs @ 80°C, 3 hrs @ 120°C

Post Curing

Satisfactory laminates for many applications can be made with GC LS 98PA Belgrade White by curing at workshop temperature (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 25°C, and then be oven-cured for 3 hours at 80°C.

Storage

GC LS 98PA Belgrade White should be stored in the dark in suitable, closed containers. It is recommended that the storage temperature should be less than 20°C where practical, but should not exceed 30°C. Ideally, containers should be opened only immediately prior to use.

Packaging

GC LS 98PA Belgrade White is supplied in 20kg and 225kg containers.

Health and Safety

Please see separate Material Safety Data Sheet.

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