

AQUAGUARD PERFORMANCE WHITE SPRAY GELCOAT



Technical Datasheet

PRODUCT CODE: C410096

AQUAGUARD PERFORMANCE is a highly durable gelcoat that exhibits outstanding performance and handling properties. The major features of this gelcoat are:-

- Improved application characteristics
- Excellent UV and weathering resistance
- Wide application range

This gelcoat has a long history of excellent performance in marine applications

FEATURES

- Excellent atomisation and general spraying characteristics
- Low odour
- Excellent flow/levelling properties
- Rapid air release
- Highly resistant to pre-release
- Good sag resistance
- Highly resistant to tripping/wrinkling
- Excellent interlaminar adhesion
- High gloss retention
- High degree of flexibility and general toughness

BENEFITS

- Easy to apply with industry standard spray equipment
- Reduced environmental/work place hazards
- Easy control of film thickness
- Minimises air entrapment
- Improved part quality
- Provides a more consistent film thickness
- Increased tolerance to application variability
- Incidences of delamination are minimised
- Reduced surface discolouration and yellowing on outdoor weathering
- Stable appearance of article during its service life
- Improved resilience which reduces the occurrence of cracking

The features combine to facilitate production of high quality parts. Aquaguard Performance Gelcoat is available in a range of colours.

TYPICAL LIQUID RESIN PROPERTIES

Regular Spray Grade

PROPERTY	TYPICAL VALUE	TEST DETAILS
Viscosity	250–300cP (Winter)	
Cone and Plate, Cps	300–350cP (Summer)	
Brookfield	12000–17000 cP	RVF Spindle 4 @ 4 RPM
Geltime (minutes)	8–12 (Winter) 11–15 (Summer)	2.0% NR20 MEKP Catalyst
Specific Gravity	1.3	
Flash Point	31°C	Setaflash

Typical values: Based on materials tested in our laboratories, but varies from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

TYPICAL CAST UNFILLED RESIN PROPERTIES

PROPERTY	TYPICAL VALUE	TEST DETAILS
Hardness	40 - 45	Barcol (GYZ 934-1) EN 59
Density	1.16 gcm ⁻³	ISO R1183
Volume Shrinkage	7 – 8%	ISO 3521
Flexural Strength	110 MPa	ISO 178
Heat Deflection	80 - 85°C	ISO 175 (1.8 MPa)

Cast resin was prepared as laid down in BS 3532 using 1% MEKP. Cured at room temperature for sixteen hours then post cured for two hours at 80°C followed by two hours at 100°C.

AQUAGUARD Gelcoats are available in other seasonal grades. Your local Allnex Composites Technical representative will be pleased to assist with your requirements.

APPLICATION GUIDELINES

Temperature	15-30°C
Catalyst Level (MEKP; 9% Active Oxygen)	1.5 – 2.5% v/w
Film thickness (wet) – apply 2 to 3 passes	25 – 30 thou

- (A) It is not recommended to exceed a catalyst level of 3.0% (v/w).
Spraying in 3 or 4 passes minimises porosity/ air entrapment.
- (B) This results in better part quality and performance.

SUITABLE MEKP INITIATORS

Curox NR20, Curox M200, Butanox M50 and Norox MEKP 9

STORAGE AND HANDLING

To ensure maximum stability and maintain optimum resin handling properties, polyester resins should be stored in closed containers, away from heat sources and sunlight. The resin should be stored away from all sources of ignition. Stored resin quantities should be kept to a reasonable minimum and used on a first in/first out stock rotation basis. Prolonged storage, or unfavourable storing conditions, may cause separation, therefore agitation of the resin before use is recommended.

STANDARD PACKAGING

Mild steel drums (225kg)
Mild steel pails (25kg)

Always refer to the MSDS before use.