

PRODUCT CODE: C411013

AQUAGUARD®XA POOL GELCOATS are high performance finishes for the production of FRP composite Swimming Pools. AQUAGUARD®XA POOL gelcoats are highly durable, and exhibit outstanding UV, weathering and chemical resistance properties, in this demanding outdoor application.

FEATURES

- Good flow/levelling properties
- Rapid air release
- Highly resistant to pre-release
- Good sag resistance
- Highly resistant to triping/wrinkling
- Excellent UV resistance
- Good gloss retention
- Excellent chemical resistance
- Excellent sprayability

BENEFITS

- Easy control of film thickness
- Minimal air entrapment
- Improved part quality
- Consistent film thickness
- Improved part quality, increased tolerance to application variability
- Maintains original colour for longer following outdoor exposure.
- Superior appearance of finished articles during service life
- Products maintain original cosmetic appearance for longer
- Can be sprayed using industry standard spray equipment.

ADDITIONAL INFORMATION

Swimming Pool Applications:

During the development of AQUAGUARD®XA POOL Gelcoat, the product was tested and qualified to meet the critical requirements of Australian Standard AS1838, indicating suitability for use as a surface finish in FRP swimming pool constructions, utilizing standard salt water chlorination systems. As part of this R&D program, well cured panels faced with AQUAGUARD®XA POOL Gelcoat were also subjected to accelerated chlorine exposure tests. Based on the resulting performance data, these gelcoats are regarded as suitable for use in FRP swimming pool and spa constructions, fitted with standard chlorination filter systems, and operating at ambient temperatures.

AQUAGUARD®XA POOL Gelcoat is not recommended for use in elevated temperature pool or spa applications where the surface finish will be subjected to continuous, long term exposures to treated pool water above 32°C. Irrespective of operating water temperature, the chlorine level should be maintained in the ideal range of 1.5 – 2.5 ppm, and a maximum level of 5 ppm should not be exceeded. pH must also be maintained in the ideal range of 7.2 – 7.4.

AQUAGUARD®XA POOL GELCOAT is not suitable for direct contact with Ozone – which is an extremely aggressive oxidiser. Alternative sanitiser

systems involving Ozone generation can be successfully used with pool constructions surfaced with AQUAGUARD®XA POOL GELCOAT provided that the ozone generation system is isolated and does not allow any ozone to come in contact with the Gelcoat surface.

TYPICAL LIQUID RESIN PROPERTIES

PROPERTY	TYPICAL VALUE
Viscosity – Brookfield RVF sp 4/4 rpm	14000 - 17000 cP
Viscosity - Cone & Plate	290 – 320 cP
Gel Time - (2% v/w MEKP NR20)	10 - 15 minutes
Shelf Life (when stored in original closed container in the shade)	4 months

Aquaguard® XA Pool Gelcoats are available in a number of colours – please refer to your local Allnex Composites representative.

APPLICATION GUIDELINES

Temperature	15 - 30°C
Catalyst Level (MEKP; 9% Active Oxygen)	1.5 - 2.5% v/w
Film thickness (wet - apply 3 to 4 passes)	20 - 28 thou. (0.5 – 0.7 mm)
Coverage to achieve above film thickness	625 - 875gm ⁻²

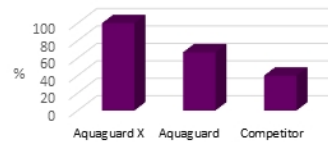
TYPICAL MECHANICAL PROPERTIES IN CURED STATE

(FULLY POSTCURED CASTING)

PROPERTY	TYPICAL VALUE	TEST DETAILS
Density	1.19 gcm ⁻³	ISO/R 1183-1970
Tensile Strength	70 MPa	ASTM D638
Tensile Elongation	3.09 %	ASTM D638
Flexural Strength	129 MPa	ASTM D790
Flexural Modulus	3.55 GPa	ASTM D790
Volume Shrinkage	7-8%	ISO 3521-1976
Heat Distortion Temperature	89°C	ISO 75-1974
Barcol 934-1 Hardness	40	Barcol Impressor

AQUAGUARD IMPROVED PERFORMANCE

Chemical Resistance Rating



Water Resistance Rating



The higher the number ratings indicate better performance

STORAGE AND HANDLING

To ensure maximum stability and maintain optimum resin handling properties, gelcoat should be stored in closed containers, away from heat sources and sunlight. The product 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 gelcoat before use is recommended.

STANDARD PACKAGING

Mild steel drums (200kg)

Mild steel pails (20kg)

Always refer to the MSDS before use.