



Technical Information - Data Sheet | Version number 001/April2013

POLYESTER GELCOAT

Isophthalic brush gelcoats of high quality

- **GCB50 Clear**
- **GCB51 White**
- **GCB52 black**

Product description

- GCB50, GCB51 and GCB52 are high performance gelcoat systems with excellent surface finishes
- Excellent chemical and water resistance and weather resistance
- Easy to brush, sag resistant and rapid cure
- GCB 50 is a clear gelcoat and accepts a range of vibrant pigments.
Please check with AMT for colours such as blues, reds and yellows which may require special application (increased film thickness)

Applications

- The GCB range of gelcoats are suitable for use in most demanding surface coat application for transport, marine, sports goods, canopies and general outdoor applications.

Characteristics

- Slightly flexible
- Exhibits excellent impact resistance and toughness
- Low reactivity offers low exotherm
- Pre-accelerated – requires addition of catalyst only

Product specifications

Property	Range	Unit
Geltime (1,8% m/m Luperox K12)	14 - 19	mins
Sag resistance - good at;	500	µm
Hide - complete at;	250	µm
Specific gravity	1,38 - 1,41	g/cm ³
Non volatile content	66 - 74	%
Flash point	28 - 31	°C

Properties of cured gelcoat

Property	Range	Unit
Flexural strength	125	MPa
Tensile Strength	54	MPa
Elongation at break	3	%
Deflection temperature (under load)	86	°C
Water absorption	45	mg/test piece
Barcol hardness	44	GY2J934-1

Note: all test are done on unfilled casting and post cured for 3 hours at 80°C.
Tests in accordance with SANS 713-2000

Applying GCB Gelcoats

- A wet film thickness of 500µm +- 100µm is recommended
- Films less than 400µm may exhibit the following;
 - Not cured properly
 - Difficult to patch
 - May show some print though
 - Susceptible to water blisters
- Films above 600µm may exhibit the following
 - Pre-release of component
 - Entrapped air or porosity
 - Possible surface cracking
 - Susceptible to weathering or discolouration

Curing characteristics

- Gel times should be checked at all times, as temperature , humidity and catalyst procedure will produce varying times
- Never exceed 3% catalyst levels or go below 1,2%
- Recommended range is 1,2% to 3,0%
- Ideal condition are 1,8% catalyst at 25°C
- Never apply gelcoats below 15°C

General processing recommendations

- GCB ranges of gelcoats are not compatible in the liquid state with ISO/NPG gelcoats or resins
- Do not over mix gelcoats
- Pay particular attention to correct mix ratios
- Over mixing breaks down gelcoat viscosity, increase in sag and styrene loss
- Ensure thorough mixing with least amount of air entrapment

Storage

- GCB gelcoats have a shelf life of three months from date of manufacture.
- GCB gelcoats must be stored between 15-25°C
- Containers must be 100% sealed, out of direct sunlight.

Packaging

- GCB gelcoats are available in 25kg, 5kg, and 1kg pack.