

CORROCOAT

CORROCOAT ARMAGEL

Page 1 of 2

TYPE:	An abrasion resistant vinyl ester co-polymer containing glass flake and silicon carbide.
SUGGESTED USE:	Immersed environments where good resistance to chemical attack combined with resistance to abrasion are required. Pipes, shutes, process tanks, etc.
LIMITATIONS:	Affected by some highly polar solvents and solutions exhibiting high pH at temperatures above 122°F (50°C).
HEALTH & SAFETY:	Before handling or using this product the material safety data sheet should be read and all precautions observed.
SURFACE PREPARATION:	Metals: Grit blast to SIS 05 5900 SA 2.5 standard. For full details refer to Corrocoat Surface Specification SP1. Concrete: See Corrocoat Surface Specification SP5.
APPLICATION EQUIPMENT:	Airless pump of 45:1 ratio or greater. Fit leather and PTFE seal combination and remove all fluid filters. ³ / ₈ " (10mm) diameter nylon lined hose with 6mm whip end, large bore gun with reverse clean spray tip. Typical tip size is 32 to 50 thou with a 45° fan. Size of tip and fan angle will vary dependent upon the nature of the work. Pressure to suit hose lengths and working conditions. (circa 2900psi (200bar)). Brush application; is not recommended except for minor touch up and stripe coating. Note: High rates of spray tip wear will be encountered with this product. Trials have shown that the silicon carbide will wear tips at a rate of approximately one for every 66 gallons (250 litres) sprayed. This value will change dependent upon spray pressure, tip size and fan angle.
APPLICATION:	Dependent upon intended use and site conditions, but Polyglass VE is normally applied as a primer coat at 20 mils (500 microns), Armagel is then applied at typically 29-98 mils (750-2500 microns). See Polyglass Application Data Sheet.
MIXING RATIO/MIXING:	98:2 base to hardener. For inhibitor use and mixing instructions refer to Polyglass Application Data Sheet.
POT LIFE:	Circa 50 minutes at 68°F (20°C) but may be varied by use of inhibitor or special manufacture, refer to Polyglass Application Data Sheet.
THINNERS:	The performance of Armagel can be adversely affected by the addition of solvents and their use is prohibited. Thinning can be achieved by the addition of not more than 5% styrene monomer to Armagel by volume i.e. maximum .27 gallons (1 liters) styrene per 5.28 gallons (20 litres) Armagel. It should be noted that dilution with styrene may affect chemical resistance.
PACKAGING:	5 gallon (18.9 liter) composites.
STORAGE LIFE:	Base and hardener 6 months, stored at temperatures below 68°F (20°C) and away from heat sources and direct sunlight. Frequent temperature cycling will shorten storage life. See other information for extension of shelf life.
COLOR AVAILABILITY:	Off white, speckled finish.
RECOMMENDED DFT:	Between 49 and 118mils (1250 and 3000microns) dependent upon service duty

CORROCOAT**CORROCOAT ARMAGEL****Page 2 of 2**

THEORETICAL SPREADING RATE:	54.18ft ² /gal at 29 mils (1.33m ² /litre at 750 microns).
VOLUME SOLIDS:	This material contains volatile liquid convertible to solids. Volume solids obtained will vary dependent upon polymerisation conditions. Nominally 99.05% of the contents are convertible to solid.
PRACTICAL SPRADING RATE:	43.18ft ² /gal at 29 mils (1.06m ² /litre at 750 microns).
SPECIFIC GRAVITY:	Base: .044 lbs/in ³ (1.22 gms/cc) Hardener: .039 lbs/in ³ (1.07 gms/cc)
CATALYST TYPE:	Methyl Ethyl Ketone Peroxide, type P2-45
MIXING RATIO:	98:2 base to hardener. Refer to Application Data Sheet for inhibitor levels and mixing.
FLASH POINT:	82.4°F (28°C). HARDNESS: Greater than 45 Barcol fully cured.
THERMAL COEFFICIENT OF LINEAR EXPANSION:	19.7 x 10 ⁻⁶ /°C
DIELECTRIC STRENGTH:	15 - 20 x 10 ³ V/mm
THERMAL CONDUCTIVITY:	0.45 W/m°K
TEMPERATURE LIMITS:	212°F (100°C) immersed; 320°F (160°C) non-immersed. No known lower limit
ABRASION RESISTANCE:	172mg loss/1000 cycles/1000gm load H18 wheel.
OVERCOATING:	It is important to observe maximum overcoating times and note these will vary substantially with climatic conditions. Minimum, as soon as gel has occurred and whilst still tacky. Maximum, at 68°F (20°C) 48 hours. Strong ultra-violet/ sunlight will substantially reduce overcoating time. Once maximum overcoating time has been reached, adhesion values attained by any subsequent coat will reduce dramatically. Should this occur overcoating should be treated as a repair, with the coating flash blasted to provide a physical key. Styrene cannot be used to reactivate the surface of this product and may impair adhesion. Take care to avoid contamination before application of subsequent coats. Ensure ventilation during cure.
CURING TIME:	At normal inhibitor level, tack-free circa 6 hrs, full cure 3-4 days at 68°F (20°C). Do not use in abrasion service until fully cured , post cure will aid performance.
CLEANING FLUID:	Methyl Ethyl Ketone, Methyl Iso Butyl Ketone - before gel.

All values are approximate. Physical data is based on the product being in good condition before polymerisation, correctly catalysed and full cure being attained. Information regarding application of the product is available in the Corrocoat manual. Should further information be required, please consult Corrocoat Technical Services.

**Reviewed 7th December 2004
Reviewed 02/2014 (No change)
U.S Revision 06/2014**