

POLYGLASS

Polyglass

Product reference: 2/10

Page 1 of 3

Product title: Polyglass

Valid from: 14th August 1997

Last reviewed: May 2019

Type

A two pack cold cured polyester/acrylic co-polymer enhanced with flaked glass.

Suggested use

Immersion; such as marine, hydro carbon, aqueous and corrosive chemical environments. Also applicable where aggressive atmospheric conditions appertain.

Limitations

Not suitable for protection against polar solvents, demineralised water and where pH conditions are below 1 or above 12.

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 ISO 8501-1 Sa 2½ standard. For full details refer to Corrocoat Surface Specification SP1.

Concrete: grit blast to remove surface laitance. See Corrocoat Surface Specification SP5.

Application equipment

For standard Polyglass: Graco King 45:1 or similar airless pump, 10mm diameter (3/8") nylon lines. Large bore mastic type gun with 30 to 60 thou reversible or titan adjustable tip. As a guide, a typical tip size would be 31-35 thou with a 60° fan pattern. The size of tip and fan pattern will vary dependent upon the nature of the work.

For Polyglass HA: brush, roller or trowel.

Application

Dependent on intended use and prevailing site conditions, but Polyglass is normally applied in wet films between 500 and 1000 microns. Polyglass Primer PPA should be used where advised. For further details see Polyglass Application Data Sheet.

Mixing ratio / mixing

98:2 base to hardener. For use on inhibitor and mixing instructions refer to Polyglass Application Data Sheet.

Pot life

Variable to suit site conditions, refer to Polyglass Application Data Sheet.

Thinners

The performance of Polyglass can be adversely affected by the addition of solvent thinners and their use is prohibited. Thinning can be achieved by the addition of not more than 5:100 styrene monomer to Polyglass by volume i.e. maximum 1.00 litres styrene per 20 litres Polyglass.

Packaging

Polyglass: 20 litre composites.

Polyglass HA: 20 litre and 5 litre composites.

Storage life

12 months stored at temperatures below 24°C and away from heat sources and direct sunlight. Frequent temperature cycling will shorten storage life.

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Page 2 of 3

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Colour availability

Off white as standard, Green, Yellow, Red Oxide and Black to order.

Recommended DFT

750 microns in atmospheric and aqueous conditions.
1000 microns in marine conditions.
1500 microns plus in highly corrosive conditions.

Theoretical spreading rate

1.33m²/litre at 750 microns.

Volume solids

This material contains volatile liquid convertible to solids. Volume solids obtained will vary dependent upon polymerisation conditions. Nominally 99.95% of the contents are convertible to solid.

Practical spreading rate

1.06m²/litre at 750 microns.

NOTE: This information is given in good faith but may increase dependent upon environment conditions, the geometry and nature of work undertaken and the skill and care of application. Corrocoat accept no responsibility for any deviation from these values.

Specific gravity

Polyglass base: 1.21 gms/cc

Hardener: 1.07 gms/cc

Flash point

26°C.

Catalyst type

Methyl Ethyl Ketone Peroxide type P2.

Mixing ratio

98:2 base to hardener, refer to Application Data Sheet for inhibitor levels.

Hardness

40 Barcol.

Tensile strength

25.5 N/mm² (3700 psi)

Elongation at break

1.36% in aqueous immersion.

Thermal coefficient of linear expansion

13.968 x 10⁻⁶ /°C.

Dielectric strength

18 - 25 x 10³ V/mm.

Thermal conductivity

398 W/m⁰K.

Temperature limits

100°C immersed.

140°C non-immersed.

No known lower limit.

Abrasion resistance

430 mg loss/1000 cycles/1000 gm load.

Overcoating

May take place as soon as the previous coat has gelled and whilst still tacky. Maximum overcoating time is 72 hours. For times in excess of 72 hours and for overcoating on concrete substrates, refer to Corrocoat for special instructions.

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Page 3 of 3

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Curing time

With standard inhibitor level, tack free 6 hours, full cure 3-4 days at 20°C, but may be immersed in many environments after 8 hours.

Cleaning solvent

Methyl Ethyl Ketone, Methyl Iso Butyl Ketone - before gel.

Reviewed 10/2001 (No changes)

Reviewed 02/2014 (No changes)

Reviewed 10/2017 (No changes)

Revised 07/2018

Reviewed 05/2019

All values are approximate. Physical data is based on the product being in good condition before polymerisation, correctly catalysed and full cure being attained. Unless otherwise stated, physical data is based on a test temperature of 20°C, test results may vary with temperature. Information regarding application of the product is available in the Corrocoat manual. Should any further information be required, please consult Corrocoat Technical Services.