

CRYSTIC[®] GELCOAT 997SMK

Isophthalic NPG Sanitary Gelcoat

Introduction

Crystic Gelcoat 997SMK is a pre accelerated Isophthalic Neopentylglycol, thixotropic and water clear polyester gelcoat specially designed to be used by airless spray equipment.

Application

Crystic Gelcoat 997SMK has been specially designed for the production of a transparent film on sanitary items, mainly sinks and vanity units, when excellent resistance to thermal chock is a key property. It is pre accelerated and only requires the addition of the catalyst to start its curing reaction.

Features and Benefits

Pure Iso - NPG base resin	Excellent resistance to hot water Excellent chemical resistance
Special additives	Outstanding thermal chock resistance
Fast curing	Fast mould turn round, time saving

Variants

This product exists for gravity gun spray process under the reference Crystic 997KY, with a minimum production size of 100Kg.

Formulation

Crystic Gelcoat 997SMK must be allowed to attain workshop temperature before use. Stir well by hand or with a low shear mixer to avoid aeration, and then allows to stand to regain thixotropy. The recommended catalyst is catalyst M (or Butanox M50) which should be added at 2% in the gelcoat.

Geltime

Catalyst level and temperature will influence the gel time. Typical geltime at 25°C of Crystic Gelcoat 997SMK for 100 parts gelcoat catalysed with 2% catalyst M is 10 to 12 min.

Physical Data - Uncured

Property	Unit	Liquid Gelcoat
Viscosity at 25°C (Brookfield RVT – sp n ⁵ – 2.5 rpm)	dPas	180 - 220
Thixotropic Index		4.7 - 4.9
Specific Gravity at 25°C		1.18
Stability In The Dark at 20°C	Month	3

Physical Data - Cured

Property	Unit	Cured Base Resin
Barcol Hardness (Model GYZJ 934-1)		45
HDT (1.8 MPa)	°C	90
Elongation at Break	%	3
Tensile Strength	MPa	70
Tensile Modulus	MPa	3400

Test according to BS 2782:1976

$$1\text{MPa} = 1\text{MN/m}^2 = 1\text{N/mm}^2 = 10.2 \text{ kgf/cm}^2$$

Application

Gently stir the gelcoat before use by hand or low shear mixer. Ensure the gelcoat has attained workshop temperature (18 - 20°C) before use.

	997SMK / 997KY
Application	Airless / Gravity Gun
Catalyst	1 to 3% M50
Airless Gun Nozzle	421
Gravity Gun Nozzle	Nozzle 20/10 to 30/10 mm
Pressure	3 to 4.5Kg/cm ²
Distance to Mould	50cm minimum
Thickness	400 - 600 Microns

Packaging

Crystic Gelcoat 997SMK is supplied in 25Kg kegs and 200Kg drums.

Storage

Crystic Gelcoat 997SMK should be stored in the dark in suitable closed containers. It is recommended that the storage temperature should be less than 20°C.

Health and safety

Please see separate Material Safety Data Sheet.

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