

# CRYSTIC<sup>®</sup> GELCOAT 967SMK EXCEL

## Iso-NPG Spray Gelcoat for Sanitaryware Applications

### Introduction

Crystic Gelcoat 967SMK Excel is a pre-accelerated Iso-NPG thixotropic polyester gelcoat specially designed to be applied by an airless spray machine.

### Applications

Crystic Gelcoat 967SMK Excel has been especially designed for the production of sanitary items, mainly sinks and vanity units, where excellent resistance to thermal shock and low microporosity are key properties. It is pre-accelerated and only requires the addition of the catalyst to start its curing reaction.

### Features and Benefits

|                    |   |
|--------------------|---|
| Iso NPG base resin | Excellent hot water resistance<br>Excellent chemical resistance   |
| Special additives  | Outstanding thermal shock resistance<br>High initial gloss and gloss retention<br>No microporosity<br>Low viscosity with high resistance to sagging |
| Easy to polish     | High gloss level easily achieved  |
| Fast curing        | Fast mould turn round, time saving  |

### Variants

This gelcoat is also available in a gravity gun spray process version under the reference Crystic Gelcoat 967K Excel. It is also available with a faster curing time under the reference Crystic Gelcoat 967SMK W Excel. This product can also be supplied with an antibacterial protection under the reference Crystic Microban Gelcoat 967SMK Excel.

### Product Characteristics

Crystic Gelcoat 967SMK Excel must be allowed to attain workshop temperature (18 - 20°C) before use. Stir well by hand or with a low shear mixer and leave to rest. The gelcoat only requires the addition of catalyst to start curing. The recommended catalyst is Butanox M50 (or other equivalent catalyst) which should be added at 2% in the gelcoat.

### Geltime

Catalyst level and temperature will influence the gel time. At 25°C, the typical geltime of Crystic Gelcoat 967SMK Excel with 2% Butanox M50 is 6 to 8 minutes.

### Application

|                                |                          |
|--------------------------------|--------------------------|
| <b>Application Temperature</b> | 18 - 20°C                |
| <b>Dilution</b>                | Ready to use             |
| <b>Catalyst</b>                | 2% Butanox M50           |
| <b>Airless Gun Nozzle</b>      | 421                      |
| <b>Gravity Gun Nozzle</b>      | Nozzle 20/10 to 30/10 mm |
| <b>Pressure</b>                | 3 to 4.5 bars            |
| <b>Distance to Mould</b>       | 50cm minimum             |
| <b>Thickness</b>               | 400 - 600 Microns        |

### Recommended Testing

It is recommended that customers test all pigmented gelcoats before use under their own conditions of application to ensure the required surface finish is achieved.

### Physical Data - Uncured

| Property  | Unit   | Liquid Gelcoat |
|---|--------|----------------|
| Viscosity at 25°C (Brookfield RVT Sp n°5, 2.5rpm) | dPas   | 300 – 350      |
| Index of Thixotropy                               |        | 5.8 – 6.2      |
| Specific Gravity at 25°C                          |        | 1.18           |
| Stability at 20°C                                 | Months | 3              |

### Physical Data - Cured

| Property                               | Unit | Fully Cured Base Resin |
|--|------|------------------------|
| Barcol Hardness (Model GYZJ 934-1)     |      | 45                     |
| Heat Deflection Temperature (1.80 MPa) | °C   | 90                     |
| Elongation at Break                    | %    | 3.0                    |
| Tensile Strength                       | MPa  | 70                     |
| Tensile Modulus                        | MPa  | 3400                   |

Curing Schedule - Test According to BS 2782:1976  
1MPa = 1MN/m<sup>2</sup> = 1N/mm<sup>2</sup> = 10.2 kgf/cm

### Packaging

Crystic Gelcoat 967SMK Excel is supplied in 25Kg kegs and 200Kg drums

### Storage

Crystic Gelcoat 967SMK Excel should be stored in its original container and out of direct sunlight. It is recommended that the storage temperature should be less than 20°C where practical, but should not exceed 30°C. Ideally, containers should be opened only immediately prior to use. Avoid proximity of heat and water infiltration risk.

### Health and Safety

Please see separate Material Safety Data Sheet.

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