

## Polyester

### Introduction

Recommended for general exterior situations where good weathering resistance is required. A specialised grade is available for architectural applications.

### Specification

Supply form	Fine powder suitable for all types of electrostatic spray equipment
Specific Gravity	1.2 – 1.7 depending on colour
Storage	Cool and dry below 25°C

### Appearance Characteristics

Colour:	Wide range available to all common colour standards and to order
Gloss:	Full range available from full gloss to matt
Aesthetic variants	Textured versions are available

### Film Performance

Meets the following criteria, as determined on 0.8mm Mild Steel test panels pre-treated with medium weight zinc phosphate, to which a typical non-textured product was applied, at a film thickness of 50-60microns and cured at 10 minutes @ 180°C metal temperature.

**N.B.** Some products within this range may be cured at different schedules, see box label or individual product data sheet for details. Typical values are noted under 'Curing Conditions'.

### Curing Conditions

High Bake Type	200°C @ 10 minutes metal temperature
Standard Bake Type	180°C @ 10 minutes metal temperature
Low Bake Type	160 - 170°C @ 10 minutes metal temperature

### Film Properties

#### Mechanical Properties

Mandrel bend test	BS3900 E1	Pass 2mm
Cross hatch adhesion	BS3900 E6	No loss of adhesion
Impact resistance	ASM D2794	Pass 100 in/lb
Scratch test	BS3900 E2	Pass 4kg
Taber abrasion resistance		Excellent
Erichsen pencil hardness		H-3H depending on formulation type
Erichsen indentation		7-9.5mm depending on formula type

### Typical Environmental Resistance Properties

Salt Fog resistance	ASTM B117 (500 hours)	Maximum 2mm creep
Humidity resistance	BS3900 F2 (500 hours)	No blistering
Exterior exposure (12 months)		Good colour and gloss retention

### Film Properties

#### Continuous Heat Resistance

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Good colour stability up to 130°C, or intermittent exposure up to 140°C, depending on formula type

### Storage and Handling

Store in dry, cool conditions, preferably below 25°C. Shelf life under these conditions will be approx 12 months. For full information on handling this product type, refer to individual Safety Data Sheet and the 'Code of Safe Practice' issued by the British Coatings Federation.

### Pre-treatment

Good quality pre-treatment is essential if the excellent properties of these products are to be obtained under field conditions. The type of pre-treatment will vary according to the metal substrate to be used.

As a general rule the article to be coated must be free from all surface contaminants and must then be treated with a suitable metal surface conversion pre-treatment e.g. iron phosphate, zinc phosphate to chromate type systems.

Our technical service department will be pleased to offer further advice on this subject if required.

### Application Guidelines

Inver powder coatings' Polyesters are suitable for use with all types of electrostatic powder spraying equipment. Our attention to processing and formulation detail ensures optimum transfer efficiency. Specially formulated versions of these products are available for use with 'Tribostatic' application equipment on request.

### Individual Product Information

Reference Number	QG810110SG
Description	RAL 7021 BLACK GREY POLYESTER SEMI GLOSS
Gloss Level (60°)	65-75
Specific Gravity	1.36 +/-0.10
Stoving Schedule	10 MINS @ 180C Metal Temperature
Film Thickness	60-80 microns
SDS No:	

### Health & Safety

We recommend all users of powder coatings to refer to the Code of Safe Practice: Application of Powder Coatings by Electrostatic Spraying (published by the British Coatings Federation of Great Britain Ltd) and our appropriate Health & Safety Data Sheet.

Inver UK Ltd Goodlass Road  
Speke, Liverpool  
L24 9HJ, England  
Tel + 44 (0) 151 486 0486  
Fax: + 44 (0) 151 486 0484  
Email: [info@inveruk.com](mailto:info@inveruk.com)



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