

# Product Datasheet



## BU Powder Coatings

### Interpon D1001 Group Code D (Series)

#### Product Description:

**Interpon D1001** is a series of polyester based powder coatings designed for the exterior environment, offering excellent light and weather resistance from a single coat finish on a variety of substrates. **Interpon D1001** powders are available in a limited range of colours in gloss and matt.

The information given in this datasheet refers to the range Interpon D1001. Specific products within the range can vary from the generic. For these products individual product datasheets are available.

#### Powder Properties:

	Result	Method
<b>Chemical type</b>	Polyester	
<b>Colour</b>	Wide range available	
<b>Gloss</b>	Various (60° head)	ASTM D523-89
<b>Specific Gravity</b>	1.2-1.8g/cm <sup>3</sup>	Theoretical
<b>Particle size</b>		Suitable for electrostatic spray
<b>Storage</b>		Dry cool conditions below 25°C
<b>Shelf Life</b>		12 months

#### Test Conditions:

The test results shown below are based on mechanical and chemical tests which (unless otherwise indicated) have been carried out under laboratory conditions and are given for guidance only. Actual product performance will depend upon the circumstances under which the product is used.

<b>Substrate</b>	Mechanical tests: Gold Seal polished steel	Chemical & durability tests: Gold Seal lightweight
<b>Pre-treatment</b>	Zinc Phosphate	
<b>Film Thickness</b>	60 – 70 microns	ISO 2360
<b>Stoving (object temperature)</b>	10 minutes at 200°C	

#### Mechanical Chemical and Durability Tests:

<b>Adhesion</b>	GT-0	ISO 2409 (2mm Crosshatch)
<b>Flexibility (conical Mandrel)</b>	Pass 3mm	ISO 6860
<b>Impact</b>	Pass 2.5mm direct and reverse	ASTM D2794
<b>Hardness</b>	Pass – no penetration to substrate (2000gms)	ISO 1518
<b>Salt Spray</b>	Pass – no corrosion creep more than 3mm from scribe	ASTM B117 (500 hours)
<b>Cyclic Humidity</b>	Pass – no blistering or loss of gloss	DIN 50017 (1000 hours)
<b>Exterior Durability</b>	Excellent – no chalking slight loss of gloss after 12 months continuous exposure but no film breakdown or reduction in protection properties.	
<b>Colour stability at elevated temperatures</b>	Excellent for continuous exposure up to 150°C	
<b>Chemical Resistance</b>	Generally excellent resistance to most acids, alkalis and oils at normal temperatures	

**Pre-treatment:**

Aluminium, steel or Zintec surfaces must be clean and free from grease.  
 Iron phosphate and lightweight zinc phosphating of ferrous metals improves corrosion resistance.  
 Aluminium surfaces may require a suitable chromate conversion, chrome free pre-treatment or flash anodising for certain applications.  
 Galvanised steel may require zinc or chromate conversion or sweep blasting.  
*Detailed advice should be sought from the pre-treatment supplier*

**Application:**

**Interpon D1001** can be applied by manual or automatic corona spray equipment. However, different electrostatic gun types may exert different charging characteristics and hence affect the appearance.

Below are starting point application parameters:

- *Fluidising air pressure* 0.4-1.0kg/cm<sup>2</sup> - *Transport air pressure* 0.4-0.8 kg/cm<sup>2</sup>  
 - *Additional air pressure* 0.4-0.8 kg/cm<sup>2</sup> - *Voltage* 60-80kV

The actual application parameters must be adapted and adjusted depending on the type of application equipment; component and with each powder batch in order to give a finish in accordance with our colour standard.

For manual application it is essential to ensure that an even film thickness is applied and in all instances sinuous gun movements should be avoided.

It is considered standard practice in the industry where colour or finish accuracy is vital, to prepare a test panel of the proposed colour using the supplied coating with the coating/curing facilities that will be used to complete the job so as to ensure satisfaction before commencing the job.

**Curing:**

Cure window: 15 minutes at 190°C; 10 minutes at 200°C; 8 minutes at 210°C

Note! Cure temperatures given refers to the substrate temperature.  
 The flow of the coatings can be affected if the cure temperature rises too slowly.  
 Over baking can cause yellowing of lighter colours

**Recycling:**

Unused powder can be reclaimed using suitable equipment and recycled through the coating system. However, due to the nature of the product, care should be taken, by means of sprayouts, to ensure that reclaimed powder has good colour and gloss uniformity as well as consistency of finish when compared to original virgin material.  
 It is important to ensure that the powder is not contaminated with any other powder, as the contaminant will show up as specks in the coating finish.

**Recommended film thickness:**

Depending on colour 60-70 microns, however due to the limited opacity of certain bright colours – (yellows; oranges and clean reds) it is necessary to apply a higher film thickness, this would vary with each colour and could require up to 100µm for coverage.  
 Please contact our technical service department for more information.

**Safety Precautions:**

Please consult the Material Safety Datasheet

**FOR PROFESSIONAL USE ONLY**

**IMPORTANT NOTE** The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality of the substrate or the many factors affecting the use and application of the product. Therefore unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.