

PRODUCT NAME**Polyester Metallic And Special Effect Powder**

ISSUE DATE 22/9/2005

PRODUCT CODE 916 Series

**PRODUCT DESCRIPTION**

A powder coating based on a polyester resin system blended with suitable metallic pigments. Designed where the user requires a superior decorative finish for exterior use. The products offer excellent flow and toughness. Other attributes can be achieved on request, including: Enhanced mar resistance from metal rubbing, and fingerprint resistance, Tribo-safe.

A range of substrates may be coated. For further details contact your local HMG representative.

**PRODUCT PROPERTIES**

A thermosetting powder coating based on a carboxylated polyester cured with suitable curing agents.

Gloss (ISO 2813)

Gloss >80%

Semi-gloss 60% ± 7

Matt 30% ± 5

Any gloss level as specified.

**TECHNICAL PROPERTIES**

All tests carried out on degreased zinc-phosphated steel coated with a 916 polyester to 70µm and cured at 10 minute @ 180°C object temperature.

The products offer:

- Good resistance to corrosion
- Good resistance against chemicals
- Excellent adhesion
- High surface hardness
- Excellent gloss stability against UV exposure

Hardness (ISO 2815) Buchholz Indentation Test

>80

Flexibility-Bend Test (ISO 1519)

(BS 3900: Part E1: 1970)

>5 mm (3/16 inch) diameter Mandrel

Adhesion (ISO 2409)

Cross hatch (BS 3900: Part E6: 1974)

Classification Gt 0

Cupping Test (ISO 1520)

(BS 3900: Part E4: 1976)

>5 mm

Impact Test – Falling Weight (ECCA T5)

(BS 3900: Part E7: 1974)

>25 kg cm (N)

**CURING INFORMATION**

See box label for curing conditions, the following is typical for the range:

Gloss and Semi-gloss:

10 minutes at 180 Celsius object temperature

Matt:

10 minutes at 120 Celsius object temperature

**CORROSION RESISTANCE****Neutral Salt Spray (ASTM B117)**

More than 500 hours with creepage of corrosion less than 2mm from scribe mark.

Resistance to Mortar (ASTM C 207)

Easy to remove. No staining

Kersternich Test (ISO 3231)

DIN 50018 KFW2.0S

More than 10 cycles with creepage less than 2mm from scribe mark.

Humidity (DIN 50017, BS 3900: Part F2: 1973)

More than 1000 hours without any effect.

Boiling Water Resistance

After 2 hours boiling water, or 1 hour pressure cooker: no defects or detachment

**CHEMICAL RESISTANCE**

These values are typical for the range. If a specific resistance is required, please contact your local HMG representative.

The range shows excellent resistance to water, brine, hydrochloric acid, dilute sulphuric, acetic and phosphoric acids, dilute alkalis, peroxides and bleach, alcohols, petroleum, oils and urea.

The range will also offer limited resistance to dilute hydrochloric and nitric acids, high octane petrol, toluene, acetone and ethyl acetate.

**COLOUR RANGE**

A selected range - Contact HMG Representative

Any standard or submitted colour standard

**GENERAL INFORMATION**

SPECIFIC GRAVITY	1.40 – 1.70 g/cm ³ depending on colour.
COVERAGE	From 10 – 14 m ² /kg at 60 microns film thickness.
STORAGE	Store between 5°C - 25°C. When not in use, cans must be kept sealed
SHELF LIFE	When stored in cool (<25°C), dry conditions – 12 months.

**CLEANING**

Ensure surfaces to be coated are dry and must be cleaned using the appropriate HMG product to remove all traces of contaminants.

HMG produce a full range of cleaners, silicone removers, degreasers and preparatory cleaners suitable for the cleaning process.

Please refer to our website for Knowledge Base article Prep-Cleaning Techniques (KNB0009) and Preparatory Cleaners from the Product Guide.

**SURFACE PREPARATION**

Please refer to Knowledge Base for details on Surface Preparation.

**HEALTH AND SAFETY**

Consult the health and safety data sheet indicated on the label.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of HMG's knowledge and belief accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use. For professional use only.