



HY53-HT SERIES

NOVEMBER 2002

Hybrid High Temperature Powder Coating



Product Data

Further developments have produced a vastly improved High Temp Epoxy / Polyester formulation that offers coatings with the following unique advantages over traditional Hybrid powder coatings. These properties include:

- Designed for use in areas where temperatures of up to 150 deg C are encountered.
- Greatly improved scratch and marr resistance.
- Excellent mechanical properties.
- Very good resistance to water, detergents and a range of chemicals.
- Excellent powder transfer and spray characteristics.
- Superb coverage at film builds down to 40 microns.

Uses

Hybrid High Temp series powder coatings are mainly used for interior or light duty exterior applications where elevated temperatures may be encountered, such as:-

- Wood or gas fire cabinet panels
- Cookware e.g. pots, camp stoves, toasters, barbecues and ovens
- Heater panels

Colour Availability

Extensive range made to individual colours and gloss levels. Also available in various textures of your choice.

Substrates

Cold rolled mild steel (CRS)
Zinc coated steels
Aluminium alloys

Specific Gravity

1.2 to 1.8, dependent on colour

Pre-treatment

CRS:	Zinc or iron phosphate
Zinc Coated Steels:	Zinc phosphate or chromate conversion
Aluminium Alloys:	Chromate conversion

Application

The High Temperature Hybrid series is suitable for Corona Electrostatic spray equipment.

Fluidised methods can be used.

For information regarding tribostatic application, please contact your local PPG Envirocron Technical Sales Representative.

Curing

10 mins @ 190 deg C (object temp).

It is not recommended that temperatures of less than that stated be used, as performance may be impaired.

Film Properties

The recommended thickness for the cured powder film is between 60 and 90 microns. It is not advised to exceed 100 microns film thickness.

Mechanical tests carried out on lightweight, zinc phosphate treated panels with 60 microns gloss finish film.

Panels baked for 10 mins @ 190 deg C (object temp).

Mechanical

Flexibility (conical mandrill) ASTM D522: Pass 3mm

Adhesion (2mm crosshatch) BS3900-E6: Pass GTO

Impact Resistance BS3900-E3: Pass 160 inch.lb.

Pencil Hardness: 2H

Chemical

Salt spray (ASTM-B117): Pass @ 1000 hours. <3mm from scribe.

Cyclic Humidity BS3900-F7: Pass no blistering or loss of gloss after 1000 hours @ 40 deg C.

Exterior Durability

Direct UV light will result in some chalking and loss of gloss after 3-6 months. UV light filtered by glass does not affect chalking. For continuous exposure to exterior weather conditions please contact your local PPG Envirocron Technical Sales Representative.

Storage and Packaging

Packaging: Cardboard boxes – 20kg. Bulk packs available to suit your requirements.

Shelf Life: 12 months minimum @ <30° C/dry. All bags must be sealed before storage.

Store in a cool, dry area.

Health & Safety

PPG Envirocron powder coatings can generally be regarded as inherently non-toxic.

Powder on the skin should be washed off using soap and water. Powder in the eyes should be washed out with water for 15 minutes.

Avoid breathing airborne dusts: wear an approved dust mask.

Ovens should be exhausted to atmosphere.

Users should refer to "Code of Safe Practice" as supplied by Paint Makers' Association (UK) and NZ Department of Labour.

For further information, refer to the Material Safety Data Sheet for this product.

CAUTION:

Improper use and handling of this product can be hazardous to health.

This product is to be used by those knowledgeable about proper application methods. PPG Industries makes no recommendation about the types of safety measures that may need to be adopted because these depend on application environment and space, of which PPG Industries is unaware and over which it has no control.

If you do not fully understand these warnings and instructions or if you cannot strictly comply with them, do not use the product.

This product is for professional use only. Not for residential use.

Technical information given verbally or in writing is based on knowledge and research, given in good faith and believed to be reliable, but no guarantee of accuracy is made or implied. Since methods and conditions of use are beyond our control, all merchandise is sold and received subject to the condition that our liability whether express or implied for any defect in quality, or for any lack of fitness for the specified use thereof, is limited to the return of the purchase price if written claim is made within 14 days from date of delivery. It is recommended that the user makes his or her own tests to determine the suitability of the product for his own requirements. Freedom from patent restrictions is not implied.

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