

POWDER COATING

Thermaprime PBP 110 Epoxy Powder Coating Barrier Primer

Date: 26/01/2019

Product Code: TLE-C540-M

Product Description:

Thermaset Limited product Thermaprime PBP 110 Epoxy Powder Coating Barrier Primer is designed for interior use or as a primer or barrier coating. This powder is specially formulated on selected epoxy resins and pigments to give a tough decorative finish on difficult substrates with excellent out-gassing and over-coating properties.

Colours Available:

Thermaset's Thermaprime PBP 110 Epoxy Powder Coating Barrier Primer TLE-C540-M is Grey RAL 7035 but a similar powder coating can be matched to customer supplied samples or to many of the RAL and BS colour ranges.

Substrate Preparation:

For maximum adhesion the substrate must be thoroughly cleaned of grease, rust etc. by shot blasting, solvent or chemical degreasing. For maximum protection it is essential to pretreat the substrate prior to the application of Thermaset Limited Thermaprime PBP 110 Epoxy Powder Coating Barrier Primer. Recommended substrate preparation is by solvent or chemical degreasing followed by grit blasting to minimum SA 2.5, Rz 35-65µm, Ra 6-10 µm and/or degreasing and zinc phosphating. If using chemical pretreatments, follow advice from the pretreatment chemical supplier.

Application:

Thermaset Limited Thermaprime PBP 110 Epoxy Powder Coating Barrier Primer TLE-C540-M can be applied by manual or automatic electrostatic spray equipment, an even dry film thickness of 60-100 microns is recommended.

Powder Properties:

Type	Thermosetting epoxy.
60° Gloss (EN ISO 2813)	Approx 3%
Specific Gravity	Approx 1.8
Particle size	Suitable for electrostatic spray
Stoving schedule	10 minutes @ 180°C peak metal temperature
Storage and shelf life	12 months when stored in cool (below 25°C) dry conditions. Open boxes must be resealed.

Exterior Durability:

Not suitable for exterior exposure. For exterior applications Thermaprime PBP 110 Epoxy Powder Coating Barrier Primer TLE-C540-M should be over-coated within 2-3 weeks with a suitable exterior grade coating such as an architectural grade polyester powder coating or polyurethane wet paint top coat.

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Test Conditions:

Unless otherwise specified, all tests have been carried out under laboratory conditions on 0.8mm zinc phosphate steel panels and are given for guidance only. Actual product performance will depend on the circumstances under which the product is used. A powder coating dry film thickness of 60-70 microns was used.

Mechanical Tests:

Flexibility (cylindrical mandrel)	ISO 1519	Pass minimum 5mm
Buchholz Hardness	ISO 2815	Pass minimum 80
Impact	ISO 6272-2	Pass minimum 2.5Nm
Erichsen cupping	ISO 1520	Pass minimum 5mm
Adhesion (2mm cross hatch)	ISO 2409	Pass Gt 0
Scratch Resistance	ISO 1518-1	Pass 4 Kg

Chemical Tests:

Constant Humidity	ISO 6270	Pass 1000 hours.
Boiling water	2 hours	No defects or detachments.
Salt Spray Resistance	ASTM B117	Pass 1000 hours, ,2mm creep from scratch.
Sulphur Dioxide	ISO 3231	After 24 cycles, infiltration<1mm from scratch.
Mortar resistance	EN 12206-1	Easy to remove, no staining.

Chemical Resistance:

Generally good resistance to acids, alkalis and oil at normal temperatures.

Health and Safety Precautions:

This product is intended for use only by professional applicators in industrial environments. Consult the relevant Material Safety Data Sheet available from Thermaset.

Restrictions of Hazardous Substances (RoHS2):

Thermaset Limited Thermaprime PBP 110 Epoxy Powder Coating Barrier Primer TLE-C540-M is suitable for use on items covered by Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (Directive 11/65/EU, ROHS 2). Product contains none (or less than the maximum allowed amount) of the following restricted chemicals:-

Lead, Mercury, Cadmium, Hexavalent Chromium or their compounds. Poly-brominated biphenyl (PBB) or Poly-brominated diphenyl ether (PDBE) flame retardants. Bis(2-ethylhexyl) phthalate (DEHP), Benzyl butyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP)

Our data sheets and sales literature are issued for the purpose of supplying product information. 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 Safety Data Sheet and the Technical Data Sheet for the 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 or condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing, 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 advices 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 improvement. It is the user's responsibility to verify that this data sheet is current prior to using the product.