INVER s.p.a. Technical Data Sheet

36366 - MP BT FTX MET GRIGIO 9006 QC



GENERAL FEATURES

This thermosetting powder with epoxy and polyester resins is suggested for polymerisation at low temperature (160°C).

The product forms a level hard film with good resistance to mechanical damage.

It has good resistance to yellowing caused by the chain stop during stoving.

APPLICATION

Due to its special content the product has excellent protective and decorative effects. It is particularly suggested for interior coating.

gested for interior coating.
To avoid variation of the metallic effect due to repeated surface rubbing, metallic pigment release on the surfaces in contact with the coating and appearence alteration due to water or chemicals, it is suggested a double coat with transparent powder.

ADVISED CYCLES

The surface to be coated must be cleaned from oils, grease or flash rust.

If particular resistance to corrosion or humidity is requi-

If particular resistance to corrosion or humidity is required, it is suggested the following pretreatment of the surface:

| for steel | sand blasting or/and iron or zinc phosphatising |
|------------------------------------|---|
| for galvanised steel and aluminium | chromatising |

HANDLING AND STORAGE

Store at temperatures lower than 30°C; higher temperatures may damage the powder by causing undesired alterations or blobs.

Storage life in original package: 18 months.

TECHNICAL DATA

| Code | Int. Method | Range | Ref. Me- thod |
|---------|---|---------------|--------------------|
| P/CL092 | Calc.specific gravity(kg/l): | 1.680 - 1.749 | |
| P/CL120 | Non volatile content(w/w)(%) 3h at 105 °C | 100.0 - 100.0 | UNI EN ISO 3251 |
| P/CL125 | Non volatile content(v/v)(%) | 100.0 - 100.0 | |
| P/CL143 | 1µm Theor.spread.rate (m2/kg): | 572 - 595 | |
| P/CL210 | Water content (%): | 0.0 - 0.0 | |
| P/YC060 | Particle size dist. <32µ(%): | 36 - 46 | |
| P/YC120 | Particle size dist. <63µ(%): | 74 - 91 | |
| P/CS010 | Dry film thick- ness(microns): | 60 - 80 | UNI ISO 2178 |

WAYS OF APPLICATION

Apply with automatic or manual guns with negative terminal (60/80KV).

The tribo application depends on the specific plant and

must be previously evaluated.

It is advised to apply in layers with the thickness of 60-80 microns and to stove at 160°C for 25 minutes. For stoving the epoxy polyester BT metallic effect products it is possible to use the following combinations of time and temperature:

| 10-15 minutes | 180°C (temperature of the support) |
|---------------|------------------------------------|
| 15-22 minutes | 170°C (temperature of the support) |
| 20-30 minutes | 160°C (temperature of the support) |

For stoving use the indications.

To achieve a consistent color/effect it is important for the coater to establish a ratio of virgin and reclaim powder and adhere to this ratio. Minimum 70% virgin powder should not be reduced.

The virgin powder percentage must be established via upper and lower tolerance samples. A final quality inspection for color is still highly advisable.

TECHNOLOGICAL FEATURES AND RESISTANCE TESTS

| The support used | UNI sheet |
|--------------------------|---------------------|
| Thickness | 60 microns |
| Stoving | 25 minutes at 160°C |
| Appearance and levelling | good |

The hardness test was carried out on zinc phosphatised steel.

| Code | Int. Method | Range | Ref. Me- thod |
|---------|---|--|------------------------------------|
| P/CM010 | Buchholz indentation test : | more than 90 | UNI EN ISO 2815 |
| P/CM181 | Pendulum-rocker hard- ness : Persoz pendulum | more than 300 | UNI EN ISO 1522 |
| P/CM040 | Erichsen cupping test (mm): | more than 3 | UNI EN ISO 1520 |
| P/CM050 | Direct impact test (cm.Kg): | more than 20 | ASTM D 2794; ISO 6272-2:2002 |
| P/CM051 | Opposite impact test(cm.kg): | more than 5 | ASTM D 2794; ISO 6272-2:2002 |
| P/CM170 | Conical mandrel : Bend test | maximum 20 mm | UNI EN ISO 6860 |
| P/CM100 | Crosscut adhesion (2mm)(GT): | 00 | UNI EN ISO 2409 |
| P/CM190 | Salt fog test : | 1000 hours la- ter - indenta- tion along the cross of 3-6 mm | UNI ISO 9227 |

NOTE TO USER

The information contained in this document while based on evidence and reliable methods can not be considered exhaustive.





This information are current to the date of issuance of

This information are current to the date of issuance of this data sheet, therefore is under user's responsibility to verify that the data provided on this sheet are current to the date of the product.

The user, under its own responsibility, shall respect all the existing provisions on hygiene and safety and shall verify every time the features and the specific and appropriate way to use the product, cause the respect of the provisions is not under producer's direct control. The manufacturer does not guarantee nor assume any liability or responsibility for whatsoever harm that might result from a misuse of the product or for damages that have arisen after the product's distribution.