# INVER s.p.a. Technical Data Sheet

### 43985 - EPOXYPOL. 180°/15' ARABESQUE SILVER BLACK



#### **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.

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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):	1.348 - 1.403	
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):	713 - 742	
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):	50 - 70	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/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 later - indentation along the cross of 3-6 mm	UNI ISO 9227
P/CM050	Direct impact test (cm.Kg):	00	ASTM D 2794; ISO 6272-2:2002

#### **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.