

GENERAL FEATURES

This thermosetting powder contains polyester resins cured with fit curing agents. The product forms a level hard film with good resistance to mechanical damage, outdoor weathering, detergents, fuels and oils. It has also good resistance to yellowing caused by the chain stop during stoving. Chemical resistance of the product results good.

APPLICATION

Due to its special content the product is particularly suggested for exterior coating.

ADVISED CYCLES

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

Mixed cycles:

If it is needed, it is possible to carry out mixed cycles by using liquid primers in combination with the Polyester Powder.

Therefore we advise:

- electrophoretic primer after phosphatising or
- spray water-borne primer after sand blasting and successive stoving.

As for the spray water-borne primer, it must be noted, that it was specially formulated in order to resolve the problem of adhesion to the support or/and among different layers, especially if durability and outdoor resistance are required.

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. Method
P/CL092	Calc. specific gravity(kg/l):	1.536 - 1.599	
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):	625 - 651	
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/CC050	Gloss 60° :	90.0 - 94.0	UNI EN ISO

Code	Int. Method	Range	Ref. Method
			2813:2001

WAYS OF APPLICATION

Apply with guns with negative terminal (60/80KV) or triboelectric guns automatically or manually. It is advised to apply the product in layers with the thickness of 60-80 microns and to stove at 160°C for 20 minutes. For stoving the Polyester BT glossy products it is possible to use the following combinations of time and temperature:

6-11 minutes	190°C (temperature of the support)
10-15 minutes	180°C (temperature of the support)
15-30 minutes	170°C (temperature of the support)
20-40 minutes	160°C (temperature of the support)

For stoving use the given indications.

TECHNOLOGICAL FEATURES AND RESISTANCE TESTS

The support used	UNI sheet
Thickness	60 microns
Stoving	20 minutes at 160°C

Chemical resistance test by immersing for 48 hours at indoor temperature into:

hydrogen chloride 10 %	film is intact
saturated hydrogen sulphide	intact
hydrogen peroxide 40 volumes	intact
ammonium hydroxide 10 %	intact
ammonium hydroxide 33 %	intact
sodium hydroxide 5 %	intact
tartaric acid 5 %	intact
citric acid 5 %	intact
lactic acid 5 %	intact
ethanol	intact
N-butanol	intact
petroleum ether	slightly softened

The chemical resistance test was carried out on zinc phosphatised steel.

Code	Int. Method	Range	Ref. Method
P/CM010	Buchholz indentation test :	more than 90	UNI EN ISO 2815
P/CM181	Pendulum-rocker hardness : Persoz pendulum	more than 300	UNI EN ISO 1522
P/CM040	Erichsen cupping test	more than 5	UNI EN ISO

Code	Int. Method	Range	Ref. Method
	(mm):		1520
P/CM050	Direct impact test (cm.Kg):	more than 25	ASTM D 2794; ISO 6272-2:2002
P/CM051	Opposite impact test(cm.kg):	more than 25	ASTM D 2794; ISO 6272-2:2002
P/CM170	Conical mandrel : Bend test	maximum 10 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/CM230	Resistance to humidity : (Humidity test)	500 hours later - no change	UNI EN ISO 6270-2:2005

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 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.