GENERAL FEATURES

This thermosetting powder contains polyester resins cured with fit curing agents specially selected for their excellent resistance to UV radiation and outdoor weathering.

The powder forms a decorative film with enhanced outdoor resistance.

The Inverpul-Q were created for coating aluminium components used in architecture and for coating galvanised steel and have all the necessary requirements for approval of the GSB specification (l.152g).

The Inverpul-Q Cat. 3 have also all the necessary requirements for approval of the Qualicoat class 1 category 3 (licence P-0554) specification.

Containing lead-free and chrome-free pigments.

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 aluminium	chromate conversion according to DIN 50939
for steel	sand blasting or/and iron or zinc phosphatising
for galvanised steel	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. Method
P/CL092	Calc.specific gravity(kg/l):	1.422 - 1.480	
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/CL140	Calculations of VOC (gr/l): (100-Non volatile%-Water%)xSGx10	00 - 00	
P/CL143	1µm Theor.spread.rate (m2/kg):	675 - 703	
P/CL210	Water content (%):	0.0 - 0.0	
P/YC060	Particle size dist. <32µ(%):	40 - 44	
P/YC120	Particle size dist. <63µ(%):	80 - 86	
P/CS010	Dry film thickness(microns):	60 - 80	UNI ISO 2178
P/CC050	Gloss 60° :	84.0 - 90.0	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 190°C for 15 minutes (temperature of the support).

For stoving of the Polyester-Q Cat. 3 products it is possible to use the following combinations of time and temperature:

7-11 minutes	200°C (temperature of the support)
10-20 minutes	190°C (temperature of the support)
15-25 minutes	180°C (temperature of the support)
20-40 minutes	170°C (temperature of the support)

For stoving use the given indications.

TECHNOLOGICAL FEATURES AND RESISTANCE TESTS

The support used	aluminium sheet
Thickness	60 microns
Stoving	15 minutes at 190°C

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

hydrochloric acid 10 %	film is intact
Nitric acid 30 %	matt, but washing off
Sulphuric acid 10 %	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 chromatised aluminium.

Code	Int. Method	Range	Ref. Method
P/CM010	Buchholz indentation test :	more than 90	UNI EN ISO 2815
P/CM040	Erichsen cupping test (mm):	more than 5	UNI EN ISO 1520

Code	Int. Method	Range	Ref. Method
P/CM050	Direct impact test (cm.Kg):	more than 25	UNI 8901
P/CM051	Opposite impact test(cm.kg):	more than 25	UNI 8901
P/CM080	Cylindrical mandrel size 4 :	does not break	UNI EN ISO 1519
P/CM100	Crosscut adhesion (2mm)(GT):	00	UNI EN ISO 2409
P/CM230	Resistance to humidity : (Humidity test)	1000 hours later - no blistering, indentation along the cross of maximum 1 mm	UNI 8744

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.