

SIRALES[®] PE 8205

PRODUCT
DATA SHEET
RS/312/071401/1

Description

Carboxylated polyester resin suitable for hybrid powder coatings.

Experimental resin. The specifications could be refined without any notice. In case of any question, please contact our sales department.

Applications

SIRALES[®] PE 8205 is suggested in combination 50/50 p.b.w. with EPOSIR[®] 7175 PG, 7168 PG and EPONAC[®] 700, to prepare powder coatings for low temperature curing cycles.

The main characteristics of the paints based on SIRALES[®] PE 8205 are high flexibility, good flow and appearance and storage stability.

Curing cycle :	7 min. at 160°C
(in real time)	12 min. at 150°C
	20 min. at 140°C
	35 min. at 130°C

Sales specification

Property	Value	Unit	Method
Acid number	70 ... 82	mg.KOH/gr	SIR 10328
Viscosity ICI at 200 °C	800 ... 3000	mPa.s	SIR 10391
Colour [§]	3 max.	Sc. Gardner	ASTM D 1544

(§) Determinated on 50% m/m solution in dimetilformammide

Typical properties

Property	Value	Unit	Method
Glass transition temperature (Tg)	55	°C	ASTM D 3418

Supply form

Product is available as irregular flakes packed in 25 Kg polyethylene bags.

Storage

The product should be stored in the original bags kept tightly closed, away from sunshine and heat sources. Under these conditions and at a normal temperature (25°C) the resin should have a stability of one year.

Safety

The product is not flammable and no toxic effect has been determined.

Further informations are provided in the relevant safety data sheet.

SIRALES[®], EPOSIR[®], SIR INDUSTRIALE registered trade mark. EPONAC[®], SPREA CHEMICAL registered trade mark.

N.B.: The data given in this brochure do not constitute characteristic properties of the single product.

To our best knowledge, the information contained in this brochure is accurate and corresponds to the truth.

However, any recommendations or suggestions are provided without any guarantee, since the conditions in which the products are used are not under our control. Furthermore, nothing contained in this brochure shall be interpreted as a recommendation for using the product in violation of any patents relating to the material and their uses.

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APPLICATION DATA
RS/312/071401/2

Starting formulation

Component	[part by weight]	
Sirales PE 8205	300	
Eposir 7168 PG	300	
Benzoin	4	
Flow control agent ^(§)	10	
Barium Sulphate ^(§§)	100	(§) Byk 360/P from BykChemie GmbH
Titanium dioxide ^(§§§)	275	(§§) Blanc Fixe HD 80 from Solvay Chemicals (§§§) Kronos 2310 from Kronos Titan GmbH

Manufacturing method:

Extruder: Buss-Ko-Kneader PLK 46; Casing setting temp.: 100°C; Kneading screw temp.: cold; rpm: 180.

Application procedure :

Corona spray gun, voltage 60 kV; Unichim steel 0.5 mm thick

Stoving cycles :

7 min. at 160°C, 12 min. at 150°C, 20 min. at 140°C, 35 min. at 130°C (in real time).

Properties of cured film of starting formulation

Erichsen slow penetration	> 8	mm	DIN 53156
Impact front / rev 1/2" ball	> 6 / > 4	N.m	ASTM D 2794

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