

SIRALES[®] PE 8212.T

PRODUCT DATA SHEET
RS/207/111301/1

Description

Carboxylated polyester resin suitable for hybrid powder coatings.

Applications

SIRALES[®] PE 8212.T is suggested in combination 50/50 p.b.w. with EPOSIR[®] 7175 PG, 7168 PG and EPONAC[®] 700, to manufacture powder coatings with enhanced gloss combined with both good flow and mechanical properties. SIRALES[®] PE 8212.T has been specifically designed to obtain matt or low gloss, high quality finish powder coatings, when formulated with small amounts of matting agents, like **Sirion[®] VP 1035**. Powder coatings manufactured with SIRALES PE 8212.T are suitable for tribo gun applications.

Curing cycle : 8...12 min. at 200°C
(in real time) 15...20 min. at 180°C.

Sales specification

Property	Value	Unit	Method
Acid number	70 ... 80	mg.KOH/gr	SIR 10328
Viscosity ICI at 200 °C	3000 ... 6000	mPa.s	SIR 10391
Colour [§]	2 max.	Sc. Gardner	ASTM D 1544

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

Typical properties

Property	Value	Unit	Method
Glass transition temperature (Tg)	63	°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[®], EPONAC[®], SIRION[®] : SIR INDUSTRIALE 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.

SIRALES[®] PE 8212.T

APPLICATION DATA
RS/207/081001/2

Starting formulation white matt powder coating

Component	[part by weight]
Sirales PE 8212.T	300
Eposir 7175	300
Sirion VP 1035	15
Benzoin	4
Flow control agent ^(§)	8
Calcium Carbonate ^(§§)	100
Titanium dioxide ^(§§§)	275

(§) Byk 360/P from BykChemie GmbH

(§§) Hydrocarb from Omya

(§§§) Kronos 2310 from Kronos Titan GmbH

Manufacturing method:

Extruder: Buss-Ko-Kneader PLK 46; Casing setting temp.: 120°C; Kneading screw temp.: cold; rpm: 150.

Application procedure :

Corona spray gun, voltage 60 kV; Unichim steel 1 mm thick

Stoving cycles :

10 minutes at 200°C; 15 minutes at 180°C (object temperature)

Film Properties

Whiteness index [DIN CIE 10°]	80
Gloss a 60°	34
Gloss a 20°	7
Impact front / rev [N.m]	> 10 / > 10

Overbaking Resistance

Baking Conditions	Film thickness µm	DE*
10 Min 180°C	81 - 87	
10 Min 200°C	80 - 85	0,37
10 Min. 220°C	81 - 86	1,81
10 Min. 240°C	80 - 86	2,66

SIRALES[®], EPOSIR[®], EPONAC[®], SIRION[®] : SIR INDUSTRIALE 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.