

SIRALES[®] PE 7201.T

PRODUCT DATA
SHEET
PROVISIONAL
RS/073/061202/1

Description

Carboxylated polyester resin, free from trimellitic anhydride, suitable for outdoor powder coatings.

Applications

Sirales PE 7201.T, in combination with β -hydroxyalkylamide (ratio 96.5/3.5) or, with TGIC (ratio 96/4), makes achievable a low-demand of hardener powder coating durable for outdoor purposes featuring a good flow, as well as mechanical and ageing characteristics. When combined by dry-blend technique with coatings based on Sirales PE 7220 allows to obtain a good matt finishing. Besides, the powder paint shows a very good tribochargeability.

Curing cycles (real time)

15 min. at 200°C

20 min. at 180°C

Sales specification

Property	Value	Unit	Method
Acid number	16 ... 24	mg KOH/gr	SIR 103281
Viscosity at 200°C	3500 ... 6500	mPa.s	SIR 10391
Colour (1)	3 max.	Sc. Gardner	ASTM D 1544

(1) Determined on 50% m/m solution on dimethylformamide.

Typical Properties

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

Supply Form

Product is available as irregular flakes packed in 25 kg Polyethylene bags.

Storage stability

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 (20°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[®]: 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 7202.T

PRODUCT
DATA SHEET
RS/195/120203/1

Description

Carboxylated polyester resin suitable for outdoor powder coatings.

Applications

The resin SIRALES[®] PE 7202.T is suitable for the production of outdoor powder coatings with a low content of β – hydroxyalkylamide (ratio 97:3 – 96.5:3.5). It enables to obtain powder coatings with the following characteristics:

- very good tribo chargeability;
- optimal mechanical properties, with a very good flow and gloss;
- very good resistance to weather agents;
- very low yellowing even with high temperature curing cycles.

Suggested curing cycles:

(real time) 10 ... 12 minutes at 180°C
 15 ... 20 minutes at 170°C

Sales specifications

Property	Value	Unit	Method
Acid number	17 – 23	mg KOH/gr	SIR 10328
Viscosity at 200°C (ICI cone plate)	5500 – 8500	MPa.s	SIR 10391
Colour (1)	3 max.	Sc. Gardner	ASTM D 1544

(1) Determined on 50% m/m solution on dimethylformamide.

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 stability

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 (not more than 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 information are provided in the safety data sheet.

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SIRALES[®] PE 7203.T

PRODUCT DATA
SHEET
RS/251T/062001/1

Description

Carboxylated polyester resin free from trimellitic anhydride, suitable for outdoor 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 7203.T, in combination with β -hydroxyalkylamide (ratio 97/3) makes achievable a low-demand of hardener powder coating durable for outdoor purposes featuring a good flow, as well as mechanical and ageing characteristics. When combined by dry-blend technique with high reactivity coatings, based on Sirales[®] PE 7220, PE 7260 and PE 7270, allows to obtain a very good matt finishing. The paints based on Sirales[®] PE 7203.T show a good tribochargeability.

Curing cycles (real time)

15 min. at 200°C

20 min. at 180°C

Sales specification

Property	Value	Unit	Method
Acid number	14 ... 20	mg KOH/gr	SIR 103281
Viscosity at 200°C	4000 ... 7000	mPa.s	SIR 10391
Colour ⁽¹⁾	3 max.	Sc. Gardner	ASTM D 1544

(1) Determined on 50% w/w solution on dimethylformamide.

Typical Properties

Property	Value	Unit	Method
Glass transition temperature	52	°C	ASTM D 3418

Supply Form

Product is available as irregular flakes packed in 25 kg Polyethylene bags.

Storage stability

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 (20°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.

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SIRALES[®] PE 7220.T

PRODUCT
DATA SHEET
RS/155T/110901/1

Description

Carboxylated polyester resin for outdoor powder coatings.

Application

Sirales[®] PE 7220 in combination with β -hydroxyalkylamides (ratio 93:7) or with TGIC (ratio 90:10) makes achievable outdoor powder coatings with high hardness and solvent resistance.

Physical blending of the powders based on it with that prepared with low hardeners demand resins, like Sirales[®] PE 7201 or PE 7202, gives good mat finishing.

The paints based on it show a good tribochargeability.

	TGIC	β -hydroxyalkylamide
Curing cycle :	10 ... 15 min. at 200°C.	8 ... 12 min. at 200°C.
(in real time)	15 ... 20 min. at 180°C.	10 ... 15 min. at 180°C. 15 ... 20 min. at 160°C.

Sales specifications

Property	Value	U.M	Method
Acid number	46 ... 54	mg.KOH/gr	SIR 10328
Viscosity ICI at 200 °C	3000 ... 6000	mPa.s	SIR 10391
Color ⁽¹⁾	3 max.	Sc. Gardner	ASTM D 1544

(1) Determined on 50% m/m solution on dimethylformamide.

Typical properties

Property	Value	U.M	Method
Glass transition temperature (T _g) ⁽²⁾	66	°C	ASTM D 3418

(2) Determined on DSC (Perkin Elmer series 7) : 20°C/minute.

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.

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SIRALES[®] PE 7260.T

PRODUCT
DATA SHEET
RS/304/061701/1

Description

Carboxylated polyester resin for outdoor powder coatings.

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

Application

Sirales[®] PE 7260.T in combination with β -hydroxyalkylamides (ratio 92:8) makes achievable powder coatings with high hardness, solvent resistance and good weathering resistance.

Dry blending of the powders based on it with that prepared with low hardeners demand resins, like Sirales[®] PE 7810 (95:5) or PE 7112 (96:4), gives very good mat finishing.

Powder coatings manufactured with Sirales[®] PE 7260.T are suitable for tribo gun applications.

Curing cycle : 10 ... 12 min. at 200°C.
(in real time) 15 ... 20 min. at 180°C.

Sales specifications

Property	Value	U.M	Method
Acid number	55 ... 65	mg.KOH/gr	SIR 10328
Viscosity ICI at 200 °C	1500 ... 3500	mPa.s	SIR 10391
Color ⁽¹⁾	2 max.	Sc. Gardner	ASTM D 1544

(1) Determined on 50% m/m solution on dimethylformamide.

Typical properties

Property	Value	U.M	Method
Glass transition temperature (T _g) ⁽²⁾	56	°C	ASTM D 3418

(2) Determined on DSC (Perkin Elmer series 7) : 20°C/minute.

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.

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