# SIRALES® PE 7320 A

PRODUCT DATA SHEET

RS/063/040204/1

#### **Description**

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

# **Applications**

Sirales PE 7320, in combination with TGIC (ratio 93/7), makes achievable a powder coating durable for outdoor purposes featuring good mechanical, gloss and weather resistance characteristics.

Curing cycles (real time) 15 min. at 200°C

20 min. at 180°C

**Sales specification** 

Property	Value	Unit	Method
Acid number	30 38	mg KOH/gr	SIR 103281
Viscosity at 200°C (ICI cone plate)	3500 - 5500	MPa.s	SIR 10391
Colour (1)	3 max.	Sc. Gardner	<b>ASTM D 1544</b>

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

#### **Typical Properties**

Property	Value	Unit	Method
Glass transition temperature (2)	68	$^{\circ}\mathrm{C}$	<b>ASTM D 3418</b>

<sup>(2)</sup> 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 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 7320 A

APPLICATION DATA RS/063/061001/1

## **Typical formulation**

604	
46	
12	
4	
334	
	46 12 4

#### **Extrusion condition**

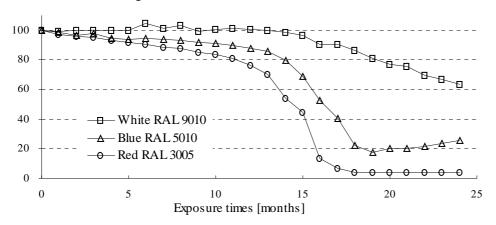
Extruder	BUSS PLK 46	
Casting temperature	120°C	
Screw temperature	Cold	
Speed	110-130 rpm	
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# Film properties (curing cycle 15 min. at 200°C; 20 min. at 180°C real time)

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Film thickness	60-100μm
Identation (DIN 53156)	> 9 mm
Direct gardner impact (ASTM D 2794)	> 10 Nm
Reverse gardner impact (ASTM D 2794)	> 10 Nm
Mandrel bend resistance (ASTM D 522)	pass

#### Florida exposure test

% retention initial gloss 60°



5 degree south - washed

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# SIRALES® PE 7320 A

APPLICATION DATA RS/063/061001/2

# Outdoor matt powder coating with Sirion VP 1016

# **Starting Formulation**

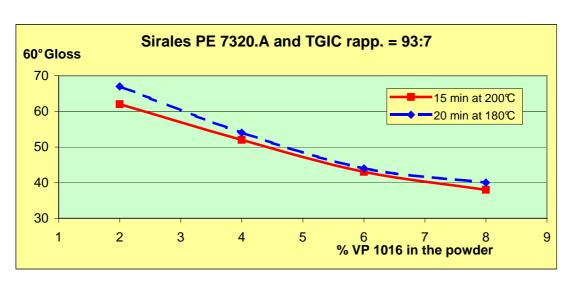
Components (pbw)	2%	4%	6%	8%
Sirales PE 7320.A	558	558	558	558
Araldit PT 810	42	42	42	42
Byk 360/P	8	8	8	8
Benzoin	4	4	4	4
Titanium dioxide Kronos 2310	368	348	328	308
Sirion VP 1016	20	40	60	80

Curing Schedule: 15 minutes at 200°C

	2%	<b>4%</b>	6%	8%
Gloss $60^{\circ}$	62	52	43	38
Gloss 20°	25	23	23	18

## Curing Schedule: 20 minutes at 180°C

	2%	4%	6%	8%
Gloss 60°	67	51	45	40
Gloss $20^{\circ}$	27	24	22	16



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