

BIOSIRCLE® SPP 9500

DATA SHEET
RS/BIOCIRCLE/082401/2

Description

Carboxylated polyester resin for outdoor powder coatings containing raw materials from renewable sources (Minimum 14% up to 40% with Bio Neopentyl glycol).

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

Applications

Biosircle® SPP 9500 in combination with the hardener based on β -hydroalkylamides (ratio 95/5), makes achievable a powder coating for architectural purposes.

The main characteristics are:

- good mechanical properties; excellent resistance to weather agents
- good flow and smoothness.
- suitable for tribo gun applications

Sales specification

Property	Value	Unit	Method
Acid number	30 – 38	mg KOH/gr	SIR 10328
Viscosity at 200°C (C&P)	2000 – 4000	mPa.s	SIR 10391
Colour ⁽¹⁾	3 max.	Sc. Gardner	ASTM D 1544

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

Typical Properties

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

Determined on DSC (Perkin Elmer mod. Diamond): 20°C/minute

Std formulation:

 Resin was formulated in the following 95/5 Recipe

Name of product	Parts per Weight
Biosircle® SPP 9500	618
Crosslinker	32
Flow agent BYK 360/P	10
Degasing agent (Benzoin)	2
White filler (TiO2 K 2310)	350

Std gel time (190°C)

Property	Norm	Industry REF	SPP 9500
Gel time (190°C)	Sec	120 - 160	140

BIOSIRCLE® is a 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.

- + Extruded on BUSS PLK 46 , range of temperature 30°C to 120°C; speed of screw 170/180 Rpm ; 2 passing through .
 - o Recipe Very stable in viscosity and consistence
- + Application on metal substrate with CORONA gun
- + Cycle time for post curing
 - o 15' (object) curing time after spray up at 200°C
 - o 20' (object) curing time after spray up at 180°C
- + curing time after spray up :
 - o 15'mn at 200°C

Property	Norm	Industry REF	SPP 9500
Thickness	Microns	70 - 90	85
Whiteness	CIE10	≥ 82	84
Film Aspect	SIR	Glossy	Glossy
Distension	SIR (0/10)	6 - 7	7
Gloss 60°	Din253	≥ 92	94
Pin holes level	SIR(0/3)	0 - 1	0
Impact Resistance	Front kg.cm	> 99	> 99
Impact Resistance	Reverse kg.cm	> 99	> 99

- + curing time after spray up :
 - o 20'mn at 180°C

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Pin holes level	SIR(0/3)	0 - 1	0
Impact Resistance	Front kg.cm	≥ 80	> 99
Impact Resistance	Reverse kg.cm	≥ 80	> 99

Supply Form

Product is available in a 225 kg lined drum, 1000 kg container and bulk.

Storage stability

The product should be stored in the original containers, in dry ambient, protected against light and direct sun-rays at temperature ranging from 5 to 30°C. In these conditions, it is stable for one year.

Safety

For safety and handling please, refer to safety data sheet of product.

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