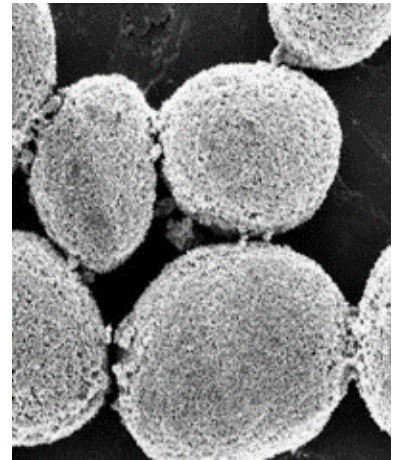


SCRATCH RESISTANCE

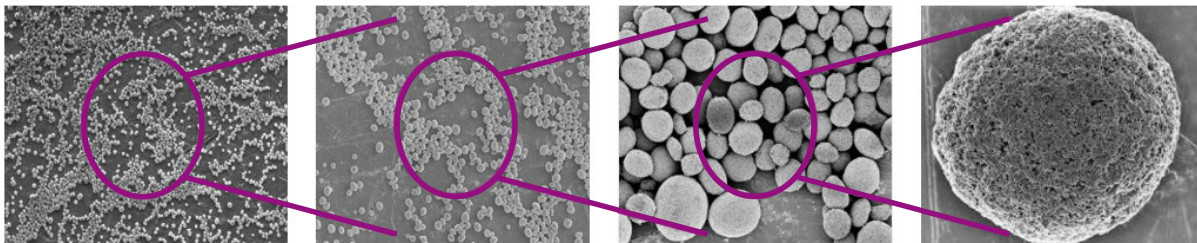
SPHERILEX[®] products for Coil Coating applications

Improvement of mechanical resistance



SPHERILEX[®] products are precipitated amorphous silica with unique spherical particle shape and very narrow particle size distribution.

SPHERILEX[®] products are available in different product sizes, but all grades are based on a patented synthesis process. As a result, this new range of silica products provides a unique balance of performance benefits.



Key properties

- Excellent burnish resistance
- Very good wash-ability and scrub resistance
- High surface smoothness
- Very low oil absorption
- Low viscosity even at high loading levels
- Very low binder demand

SPHERILEX[®] Product Information

PROPERTIES	DP-0111	DP-0112	DP-0115
Oil absorption (cc/100 g)	30–50	40–60	30–50
Median particle size (µm)	~5.5	~10	~15
BET Surface Area (m ² /g)	<12	<12	<12



[Click here for more information!](#)

Matting efficiency and pencil hardness @ 20 µm dry film layer thickness

Combination of SPHERILEX® and ACEMATT® 810 – white Polyester-Melamine formulation

SPHERILEX® ACEMATT®	DOSAGE (%)	GRINDOMETER VALUE (µm)	GLOSS (GU)			PENCIL HARDNESS	ROUGHNESS (µm)	
			20°	60°	85°		Ra	Rz
BLANK	-	<10	94.6	99.6	98.5	3H	0.08	0.44
ACEMATT® 810	2.8	30	5.2	32.0	58.3	2H	0.14	1.29
SPHERILEX® DP – 0111 BLANK	2.5 -	18	43.7	80.6	93.4	6H	0.15	1.32
SPHERILEX® DP – 0112 BLANK	2.5 -	20	43.1	76.3	88.1	6H	0.24	2.17
SPHERILEX® DP – 0115 BLANK	2.5 -	30	49.5	77.5	84.4	6H	0.33	3.59
SPHERILEX® DP – 0111 ACEMATT® 810	2.5 2.8	18	4.1	27.5	55.4	6H	0.50	3.63
SPHERILEX® DP – 0112 ACEMATT® 810	2.5 2.8	20	3.9	26.0	51.2	6H	0.53	3.96
SPHERILEX® DP – 0115 ACEMATT® 810	2.5 2.8	30	3.8	25.5	47.1	6H	0.56	4.16

Combination of SPHERILEX® and ACEMATT® 3400 – white Polyurethane formulation

SPHERILEX® ACEMATT®	DOSAGE (%)	GRINDOMETER VALUE (µm)	GLOSS (GU)			PENCIL HARDNESS	ROUGHNESS (µm)	
			20°	60°	85°		Ra	Rz
BLANK	-	<10	77.8	91.5	98.6	3H	0.09	0.60
ACEMATT® 3400	3.0	30	1.5	5.9	28.4	3H	0.49	4.29
SPHERILEX® DP – 0111 ACEMATT® 3400	2.5 3.0	18	1.4	6.2	30.6	5H	0.53	4.36
SPHERILEX® DP – 0112 ACEMATT® 3400	2.5 3.0	20	1.4	5.9	23.5	5H	0.63	5.34
SPHERILEX® DP – 0115 ACEMATT® 3400	2.5 3.0	30	1.3	4.9	17.3	5H	1.02	8.42

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