

CS-SiA-350

Electrically conductive lacquer paint for the production of electrically conductive heating foils & layer resistors

Product:	CS-SiA-350 is a new, electrically highly conductive, electrically stable, conductive lacquer. The binder used is perfect for continuous loads up to 350 ° C. CS-SiA-350 is very well compatible with organic polymer dispersions. CS-SiA-350 has an NTC or PTC effect depending on the degree of sintering.	
Application:	CS-SiA-350, the coating industry produces electrically conductive layers with different layer thicknesses (2-100 µm, 10 -2000 Ω □). Machined layers are extremely homogeneous in heat radiation. Electrical power of up to 1000W / m ² are possible to achieve by applying electrical voltage. Typical applications are printed floor heating, wall heaters, IR heaters, technical system heaters in and for air, automobile, railway and ship traffic as well as for industrial de-icing systems and much more. CS-SiA-350 can also be used as EMV Isolation / Shielding.	
Industrial processing:	The most precise and homogeneous conductive layer will be obtained by coating machines. R2R, screen-printing or high-tech slot dye processes are qualified. The best adhesion of the CS SiA-350 is obtained on a hydrophilic or Corona modified PET or PEEK film surface. If the conductivity is too high diluted the CS-SiA-350 with deionized water or by the pure binder itself.	
Laboratory coating:	www.mtv-messtechnik.de , Rack laboratory equipment for preliminary tests with high precision of the layer thicknesses for the formats A5 and A4	
Coverage:	CS-SiA-350, 0.01 to 0.500 kg / m ² , depending on layer thickness and planned application., For a dry film of 5 micron, 10 ml of lacquer / m ² is required	
Cleaning:	Immediately after use (possibly a little detergent)	
Drying time:	Dust dry: after approximately 20 minutes, at RT 20 ° C, rework: after at least 4 hours	
Dehydration:	10-30 minutes at 150 ° C. (sintering carbon pigments), stove sintering: 45 minutes at 250 ° C	
Properties:	Processing:	R2R, Screen printing, High Tech (Slot dye)
	Solid content:	about 55%, D = 1.23 kg / L
	Degree of gloss:	dull matt
	Binder:	polysiloxane, specific weight approx. 1.40 kg / L
	Color:	Black
	Breaking strength :	finished film approx. 5 MPa
	Tensile strength:	200%
	Viscosity:	3000-10000 mPAs
	Thermoplastic:	stable
	Laminate:	suitable for high pressure and vacuum laminating.
	Overtone:	overcoating the dry film with an insulating paint / varnish is possible; But first check compatibility
	Dilution:	Ready for use, if necessary with water or Isobutanol
	Shelf-life:	well sealed, 6 -12 months, dry and cool (frost-free, never below + 5 ° C). (Bleed or gasify N ₂)
Container:	Container:	1kg, 5kg, 20kg.120kg Plastic bucket (On request)
Classification:	SZID:	none / Registration:
Disposal:	Form:	As special waste, do not allow to enter drains or waterways.
Transport:	RID / ADR / GGVSE: UN 1993, Class 3, Packing Group 3	

CS-SiA-350: If an electrical conductive lacquer has an electrical layer resistance of approx. 50 Ohm / square at a dry layer thickness of approx. 20 µm. By diluting with CS-SiA-350 the electrical layer resistance can be increased indefinitely.

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