

Electrically Conductive Heating Paint

CSG-IRG 510

Characteristics:

Aqueous, solvent-free, electrically conductive low-resistance Acrylatedispersion.

Specification:

| | | | |
|---------------|-------|--------|----------|
| Color: | | | Black |
| Solid content | % | 56 | ISO 3251 |
| PH value | | 8 | ISO 976 |
| Viscosity | mPas | 3-5000 | ISO 2555 |
| VOC | g / L | <0.2 | |
| Pigment | µm | = <10 | D90 |
| Pigment | µm | 13 | D50 |

following:

Other characteristics

| | | | |
|----------|--------|-------|------------|
| Density | g / ml | 1.25 | ISO 2811-1 |
| SD Value | m | 0.1 m | ISTM |

Film properties:

| | | | |
|-----------------------|--------------------|-------|------------|
| Resistance, electr. | Ω / \square | 3 | ISTM |
| Film resistance (24h) | $^{\circ} C$ | > 120 | ISTM |
| Tensile strength | N/mm ² | 2.3 | ISTM |
| Productivity (200µm) | m ² /L | 5 | ISTM (wet) |

Curing proposition :

| | | | |
|----------------------------|--------------|------|------|
| Sintering temperature | $^{\circ} C$ | 120 | ISTM |
| Sintering time (thickness) | Min | 2-10 | ISTM |
| Speed (band) | m/min | 5-10 | ISTM |

Storage:

| | | | |
|-------------------------|-----|----|-------------------|
| Shelf life (month) | M | 12 | ISTM |
| Frost stability (cycle) | F/H | 5 | ISTM (frost/heat) |

In original sealed containers are COATING SUISSE dispersions and Varnishes are 12 months from delivery at 20 ° C storable. The Recommended storage temperature is + 5 until + 25 ° C. Freezing or temperatures above 30 ° C can adversely affect the viscosity and thus the average particle size and lead to sedimentation or coagulation. A Contamination with Bacteria, fungi or algae can irreversibly damage the product.

However, storage for longer than 12 months from the date of shipment means not necessarily that the product is useless. Before using a longer stored product, you first need the values of the specification check. A guarantee or liability after expiry of the 12 months COATING SUISS E GmbH does not accept. The product must be stirred in each case.

Delivery:

Plastic cans 1 liter (sample container)

Plastic canister 5 liters (20 liters / carton)

Processing:*

Particularly suitable and recommended for machine processing by means of Rackel / R2R, or Screen Printing. The paint is ready for use. The best adhesion is achieved on hydrophilic substrates or with primers hydrophilically modified surfaces / films.

Application:

Particularly suitable for the production of electrically conductive Low-resistance films and coatings. By diluting with water or Binder, the varnish is adjustable in its electrical spectrum.

Hazard identification:

For product safety, please refer to our current Material Safety Data Sheet. Preservatives MIT & BIT.

SZID no / Application: SZID 236308

According to RID / ARD no hazardous material

GHS : invironment

Hints:

- Electrically homogeneous and "hot spot" free heat (IR) radiation is obtained only with a mechanical coating! Rolling, spreading or spraying does not always result in 100% homogeneous layer thicknesses.
- Contaminants can be cleaned easily with water and a little detergent.

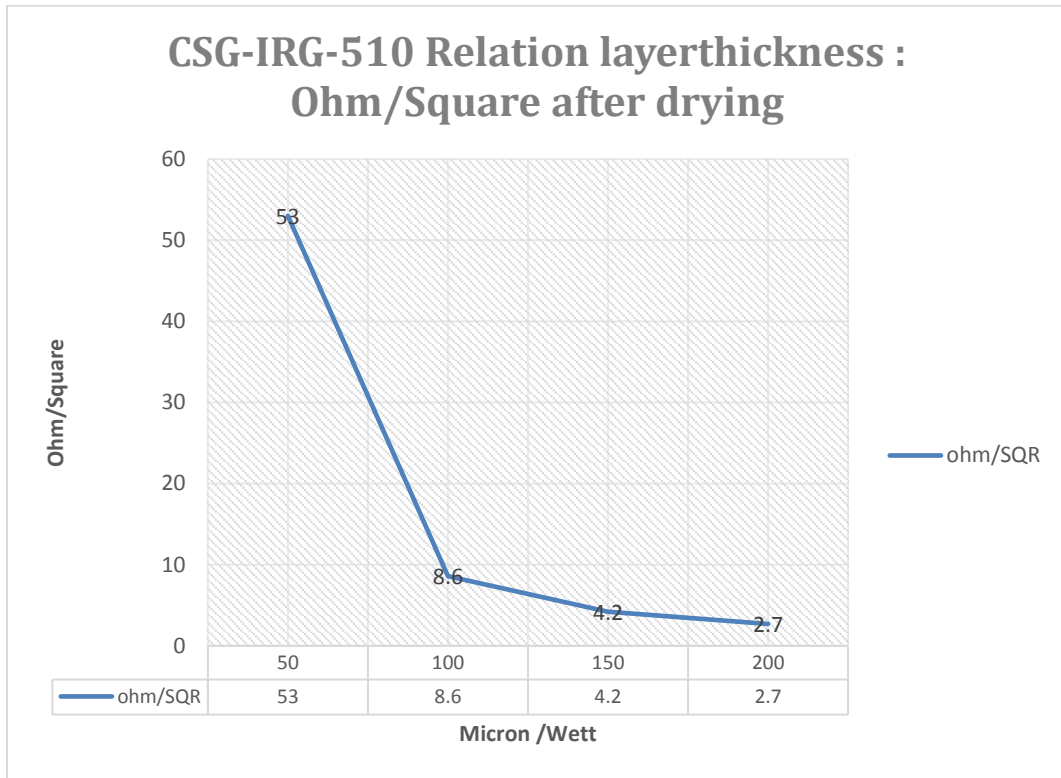


Fig : 1

Relationship between electrical resistance and layer thickness after drying at 10 minutes at 80°C. The solid content of the coating is about 50 - 55 %. The absolute dry film thickness can be assumed to be the half of the wet film thickness.

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