

## General Information

**Sicryst™ RI-20DM-1**, a resistive ink based on **carbon black nanoparticles** in diethylene glycol monomethyl ether (DGME), designed for digital Inkjet printing. The ink offers low viscosity, robust jetting, good printability and storage at ambient conditions. This ink can be used to print embedded resistors.

## Ink Properties

Properties	Typical Values
Solid (w/w)	20 %
Carbon Black (w/w)	10 %
Particle Size (Lumisizer®)	d50 = 66 nm, d90 = 110 nm
Specific Gravity	1.06 g/ml
Viscosity (Brookfield, Cone Spindle 40)	25 cP (25°C)
	22 cP (30°C)
	20 cP (35°C)
	18 cP (40°C)
Surface Tension (Pendant Drop Method)	34 dyn/cm
Shelf Life	9 months at 25°C

## Electrical Properties

Substrate	Sintering Profile	Resistivity (4PP)
Glass	150°C / 60 min	~ 0.6 Ω·cm
Glass	240°C / 60 min	~ 0.3 Ω·cm

## Compatible printheads<sup>#</sup>

Ink works well, among others, with printheads: **Ricoh E3**

## Product Applications

Digital Printing (Inkjet), Printed Electronics, Embedded Resistors

<sup>#</sup> - Printheads listed here were tested and perform well. Other compatible printheads may also be applicable.