

Creating Material Change



SynerG Conductive Ink & Paste P080055 Technical Data Sheet



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SYNERG Conductive Ink & Paste

Antistatic Transparent Graphene Ink

Haydale's SYNERG P080055 is a screen printing ink which is utilised to produce ink film with transparency and low electrical conductivity. It is particularly designed for optimal properties on polyester sheet to meet the requirements for fabrication of several transparent films.

Chemical family: Graphene PEDOT/PSS composite
 Health and Safety: See the Material Safety Data Sheet (MSDS) and product labels before use.

Physical properties

Test Item	Performance
Appearance	Dark blue paste
Solid content	1.5 – 2.5%
Surface resistivity: The properties on glass coated by spin coating, curing condition: 130°C for 3 min	2000 – 3000 Ω/sq
% Transmission	90 – 95%
Pencil hardness	5H - 7H
Scratch resistance	5B (Excellent)
pH	2.0 – 3.0 at 25°C ± 2°C
Density	0.9 – 1.2 g/cm ³ at 25°C ± 2°C
Viscosity: Value measured by Brookfield DV-II+ Pro at spindle number of S64	1,200 – 1,800 mPa·s

Physical properties

Typical Guidelines and Methods	
Printing equipment	Silk-screen mesh, squeegee, screen printer either automatic or manual type.
Substrate types	Typical plastics, for example PET, PC, etc.
Curing conditions	Can be dried at 130-150°C for 3-5 minutes in box oven.
Before use	Stir vigorously to be homogeneous.
Clean up solvent	Pre-clean the substrate surface with ethanol or iso-propanol to eliminate any contaminant and to protect non-homogeneous film after coating.
Storage	Store at 5-25°C and avoid freezing. Close the lid of product container tightly after use to prevent solvent evaporation.
Shelf life	6 months.

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Contact us: T: +44(0)1269 842946 E: info@haydale.com