

LSC40-I LA-SR-CR INTERCONNECT SCREEN PRINTABLE INK

Product Description

LSC40-I is part of the American Elements system of solid oxide fuel cell (SOFC) electrode, electrolyte and interconnect products. It is a ready to screen print highly conductive non-aqueous Lanthanum Strontium Chromite ink. It exhibits excellent long term stability in both oxidizing and reducing environments. It is compatible with all American Elements SOFC interconnect materials and electrolytes such as Product Code YSZ8-I (Yttria Stabilized Zirconia Electrolyte Ink). American Elements LSC products are perovskite (ABO_3) compounds also available with varying mole% Sr. LSC40-NI can also be used as an electrode for American Elements Ceria Electrolyte Inks.

LSC40-I

Printing

Processing Parameters

-325 Mesh Screen

1.1 mil wire

0.5 mil emulsion

Drying

10 minutes @ 150° C

Suggested Firing Temperature

1,150° C

(Do not fire above 1,200° C on zirconia-based substrates)

Thinners

American Elements RF20 (2-Propanol)

American Elements RF30 (Terpineol)

Typical Properties

Thickness

Dried 20 μ m

Fired 10 μ m

Bulk Resistivity

~ 30 ohm cm

Coverage

120 cm^2/g of LSC (Coverage will vary with Film Thickness)

Particle Size

$D_{50} = 0.2 \mu\text{m}$

Specific Surface Area

~ 6 m^2/g
