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CERMET GOLD CONDUCTOR

8886
8886-A

Thin-Printing, Etchable Conductor

ESL 8886 and 8886-A are fritless gold conductors based on a new concept. They are designed for screen printing applications as are conventional thick film materials, but provide a dense film of approximately one micrometer thick. Using two layers of 8886 or 8886-A, the fired film can be etched to a very fine line pattern without exhibiting discontinuities. ESL 8886 and 8886-A are suitable for printing on the top of most high temperature underglazes such as ESL Code129-C. The 8886-A can be refired up to 6 times without blistering.

ESL# 8886 and 8886-A are not suitable for use on bare alumina substrates.

PASTE DATA

VISCOSITY:

(Brookfield RVT, 10 rpm, No. 4 spindle, 25.5°C±0.5°C)

15-25 Pa·s

PROCESSING

SCREEN MESH/EMULSION:

325-400 mesh/0.0 μm

DRYING: (125°C)

15 minutes

FIRING TEMPERATURE RANGE:

OPTIMUM:

850°C

TIME AT PEAK:

10-12 minutes

TOTAL CYCLE:

45 minutes to 1 hour

RESISTIVITY:

1 layer

< 50 mΩ/sq.

2 layers

< 30 mΩ/sq.

WIRE BONDABILITY: (On glazed substrates)

1 mil Au wire or Al wire

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ESL Affiliates

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FILM THICKNESS:

1 layer	0.9-1.3 μ m
2 layers	1.8-2.6 μ m

REFIRING: (8886-A only)

(Two layers, separately fired, 6x at 850°C)

No blisters

PRINTING:

After printing, sufficient leveling time must be provided to allow any bubbles that form to burst open and level. The dried film should be smooth and shiny before firing.

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CAUTION: Proper industrial safety precautions should be exercised in using these products. Use with adequate ventilation. Avoid prolonged contact with skin or inhalation of any vapors emitted during use or heating of these compositions. The use of safety eye goggles, gloves or hand protection creams is recommended. Wash hands or skin thoroughly with soap and water after using these products. Do not eat or smoke in areas where these materials are used. Refer to appropriate MSDS sheet.

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