



Electro-Science Laboratories, Inc.

416 East Church Road • King of Prussia, PA 19406-2625, U.S.A
610-272-8000 • Fax: 610-272-6759 • www.ElectroScience.com • Sales@ElectroScience.com

CERMET GOLD CONDUCTOR

8886
8886-A

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 1.0 μm thick. Using 2 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 Code 129-C and are compatible with organometallic golds such as ESL D-8084. 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 \pm 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 m Ω /sq.

2 layers

< 30 m Ω /sq.

WIRE BONDABILITY: (On glazed substrates)

1 mil Au wire or Al wire

8886 & 8886-A 9607-B

ESL Affiliates

Japan: ESL-Nippon Company, Ltd. • Sukegawa Bldg. • 6th floor • 3-4 Yanagibashi 1-chome • Taito-ku • Tokyo 111, Japan • Tel: (011-81)-3-3864-8521 • Fax: (011-81)-3-3864-9270
NipponSales@ESLNippon.com

China: Shanghai Agmet Electro-Science Laboratory Ltd. • Second Floor Bldg. 12A1 • #223 North Fe Te Road • Waigaoqiao Free Trade Zone • Shanghai, China
Tel: (011-86)-21-5866-0497 • Fax: (011-86)-21-5866-0497 • ShanghaiSales@ShanghaiESL.com

Europe: Agmet, Ltd. • 8 Commercial Road • Reading, Berkshire, England RG2 0QZ • Tel: (011-44)-118-987-3139 • Fax: (011-44)-118-986-7331 • Sales@ESLEurope.co.uk

See Caution and Disclaimer on other side.

FILM THICKNESS:

1 layer	0.9-1.3 μm
2 layers	1.8-2.6 μm

REFIRING: (8886-A only)

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

No blisters

8886 & 8886-A 9607-B

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.

DISCLAIMER: The product information and recommendations contained herein are based on data obtained by tests we believe to be accurate, but the accuracy and completeness thereof is not guaranteed. No warranty is expressed or implied regarding the accuracy of these data, the results obtained from the use hereof, or that any such use will not infringe any patent. Electro-Science assumes no liability for any injury, loss, or damage, direct or consequential arising out of its use by others. This information is furnished upon the condition that the person receiving it shall make their own tests to determine the suitability thereof for their particular use, before using it. User assumes all risk and liability whatsoever in connection with their intended use. Electro-Science's only obligation shall be to replace such quantity of the product proved defective.
