



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

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DIELECTRIC GLAZE PASTE

CODE 129 C

ESL Code 129 C is a screen-printable, smooth surface dielectric designed for thermal printhead underglaze and other high temperature glaze applications

PASTE DATA

Rheology:

Viscosity:

(Brookfield RVT, 10 rpm,
ABZ spindle, 25.5 ± 0.5 °C)

150 ± 50 Pa.s

Colour:

Off white

Solids Content:

72 - 75 %

Shelf Life (20 - 25 °C):

6 months

PROCESSING

Screen Mesh, Emulsion:

200 - 325 S/S, 37.5 µm

Levelling Time (at 20°C):

5 - 10 min

Drying Time (at 125°C):

10 - 15 min

Firing Temperature Range:

1350°C

Time at peak:

15 min

Firing Atmosphere:

air

Flow Rates:

10 - 60 litres / hour

Firing Profiles:

(See page 2)

Substrate for Calibration:

96% alumina

Thinner:

ESL 401

ESL Europe CODE 129 C 9808-B

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

Fired Film Thickness:
(2 co-fired layers)

50 µm total

TCE:
(25 - 400 °C)

67 - 68 x 10⁻⁷ / °C

Glass Transition Point (Tg):

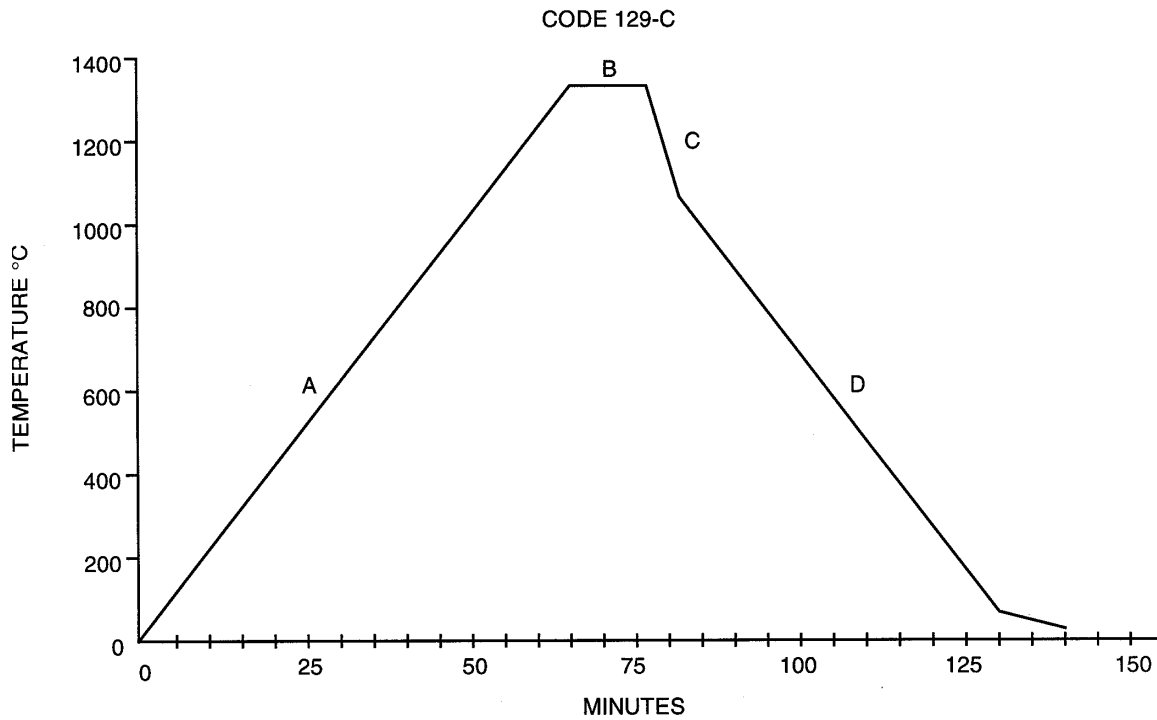
703°C

Dilatometric Softening Point:

761°C

Surface Smoothness:
(50 µm)

Ra = 0.04 µm
meniscus 5 µm



Segment	Mode	Rate (°C/min)	From (°C)	To (°C)	Time (min)
A	Heat	20	25	1350	66
B	Isothermal	0	1350	1350	15
C	Cool	50	1350	1100	5
D	Cool	20	1100	25	55

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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 vapours 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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