

TECHNICAL DATA SHEET		RCA-2000 LT200/AD-100 LT100 2007.03.30
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Liquid adhesive (Screen-patterned)

RCA-2000 LT200 / AD-100 LT100

1. Features

RCA-2000 LT200/AD-100 LT100 is a screen-patterned liquid adhesive with adhesion to several materials such as PET film, copper foil etc.

- Easy to control coating area and thickness selectively
- Curable in lower temperature, and excellent adhesion to PET film.
- Low cost compared with hot melt type adhesive sheet

2. Specification

Color	White
Characteristic	Dual-component liquid type
Mixing ratio	Main agent[RCA-2000 LT200]: Hardener[AD-100 LT100] = 90:10
Viscosity After mixing	90 ± 30dPa·s (Cone-late type viscometer, 5rpm / 25 deg. C)
Solid Content	Approx. 47 wt%
Pot life	24 hours (Stored in dark place at less than 25 deg. C)
Shelf life	Under evaluation (Stored in dark place at less than 25 deg. C)

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3. Properties

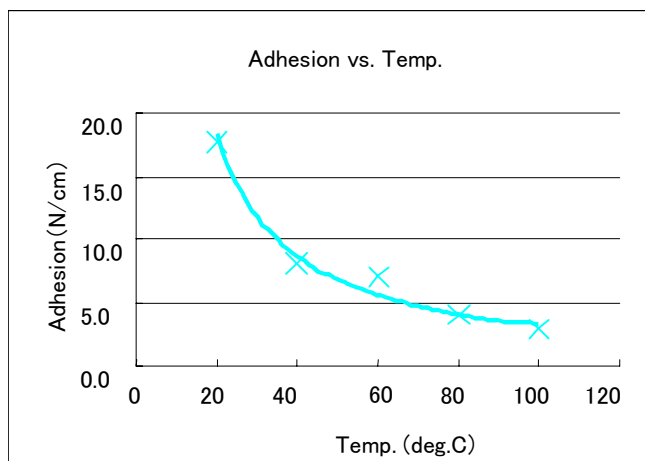
3-1. Process Condition

Item	Condition
Substrate	Copper foil clad FR-4 / PET film
Pre-treatment	Physical abrasion and acid treatment, no surface treatment for PET film
Coating	Screen printing, #100 mesh Tetron screen (on Copper clad FR-4 core material)
Pre-cure	80 deg. C for 30 min. (hot air convection oven)
Adhesion press	Arranging PET film and de-bubbling by vacuum laminating after cooling-off of Pre-cure (120 deg. C for 60 sec.)
Adhesion cure	120 deg. C for 30 min. Thickness of adhesive layer : 15~20 μm

3-2. Properties

Item	Result	Remarks
Adhesion strength	15N/cm (PET side detachment)	T peeling, 300mm pulling speed
Heat resistance	150 deg. C	Visual inspection, checking deterioration by detachment test after heating for 30 min. heating
Insulation resistance	$6 \times 10^{13} \Omega$ (Initial value)	IPC B pattern (50V)
Dielectric constant	2-3	
Dissipation factor	0.03	

3-3. Temperature dependence of adhesion strength (between PET film and Copper foil)



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3-4. Other properties

Item	Result
Adhesion stability ¹⁾	No change for the initial value
Thermal deformation ²⁾	No deformation
Thermogravimetric loss late ³⁾	2.5%
Discoloration ⁴⁾	No discoloration

1) Laminate copper foil and check adhesion after heating under 200 deg. C for 5 hours.

2) Screen printing on BT substrate and check after heating under 180 deg. C for 60 min. + 200 deg. C. for 5 hours.

3) Trace Thermogravimetric loss late by 200 deg. C for 5 hours holding with TG/CTA (made by SEIKO Instruments Corporation).

4) Screen printing on BT substrate and check color and gross level by visual inspection after heating under 180 deg. C for 60 min. + 200 deg. C.

3-5. Adhesion Compatibility by difference Core Materials

Core Material	Adhesion Compatibility
FR-4 material	Good (Core material demolition)
FR-1, 2 material	Good (Core material demolition)
BT material	Good (Core material demolition)
Copper foil	Good (Core material demolition)
Non-treatment PET film	Good (Core material demolition)
Treated PET film	Good (Core material demolition)

Note: The all test data mentioned in this technical data sheet are based on the result of our laboratory tests under above process conditions in each item and just for reference, not to guarantee the same results in your laboratory test.

Before using the product, please study its properties, methods for using it.