

EL-9032

Electrically Conductive Transfer Adhesive



US Patent #5,082,595

PRODUCT DESCRIPTION

EL-9032 is a highly electrically conductive pressure-sensitive adhesive transfer film made with an acrylic adhesive filled with proprietary conductive particles. The tape is predominately conductive in the Z axis with limited XY axis conductivity.

FEATURES

- 1 mil highly conductive acrylic pressure-sensitive adhesive
- A double-coated polyester film release liner

BENEFITS

- Thin bond line
- Liner won't tear
- Outstanding electrical conductivity along z-axis

PRODUCT APPLICATIONS

Suggested for fabricating EMI shields, electrical interconnections and ground plane assemblies for cellular phones, computers, PDA's, disk drives, modems and automotive electronics. Users should test the product to ensure it meets the specific needs of their application(s). Adhesives Research can tailor the product to meet the needs of specific applications as requested by customers.

PRODUCT PROFILE AND DIAGRAM

Conductive Adhesive 1mil [25 µm]	Polyester Liner 2 mils [51 µm]
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PHYSICAL PROPERTIES *

180° Peel Adhesion (1 hr. dwell, PSTC Panel, 12 ipm [5mm/sec]):	>25 oz./in. [2.8N/cm]	ART# 1005
500g Dead Load Shear (500g load, ¼ sq.in. [1.6 sq.cm.]):	>40 min.	ART# 2054
Liner Release (300 in./min. [127mm/sec.]):	20-60 g/2 in.	ART# 1034

ELECTRICAL PROPERTIES *

Volume Resistance (measured with 1" x 1" SS electrodes):	<10 mΩ	ART# 3035
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* Typical Properties, The data provided in this Product Information sheet are typical and should not be used for specification purposes.

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Reference Test Methods:

Peel Adhesion: ART#1005 (Adhesives Research Test), ASTM D3330 / D3330M, PSTC #3
 Dead Load Shear: ART# 2054 (Adhesives Research Test), ASTM D3654 / D3654M, PSTC #7
 Liner Release: ART# 1034 (Adhesives Research Test), ASTM D3330 / D3330M, PSTC #4

STORAGE AND SHELF LIFE

Two years from date of manufacturing when stored at 70°F (21°C), 50% R.H.

SERVICE TEMPERATURE RANGES

Minimum Application Temperature: 50°F (10°C)
 Maximum Operating Temperature: 250°F (121°C)

(Reviewed – 09-22-08)

APPLICATION AND STORAGE OF PRESSURE-SENSITIVE ADHESIVE TAPES

Pressure-sensitive adhesive tapes function as a mechanical product; however, the adhesive itself is a chemical composition that can be sensitive to environmental conditions. A purchaser of pressure-sensitive adhesive products should be aware of the shelf life of each product and not purchase more than it can use before the expiration date. Shipping and storage conditions affect shelf life. The optimum storage temperature is 70°F (21°C). Cool, dry storage is recommended.

For best results...

- 1) The surfaces you wish to bond should be clean and free of oil, moisture and dust. If the surface temperature is below 40°F, it may be difficult to achieve a proper bond.
- 2) Do not use a pressure-sensitive adhesive product where it will be exposed to temperatures lower or higher than those designated for each product. Heat can destroy the effectiveness of the bond and extreme cold can cause the adhesive to harden and not adhere properly.
- 3) When the tape is applied, use firm hand or lamination pressure to achieve contact between the adhesive and the surface to which it is applied. Hand rollers or nip rollers may be needed for certain products or applications.

Consult your AR sales representative if you need additional information.

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Internet: www.adhesivesresearch.com

Adhesives Research, Inc.
 400 Seaks Run Road, P.O. Box 100
 Glen Rock, PA 17327
 Toll-free: 800-445-6240
 Phone: 717-235-7979
 Fax: 717-235-8320

Adhesives Research Ireland Ltd.
 Raheen Business Park, Limerick, Ireland
 Phone: +353 61 300 300
 Fax: +353 61 300 700

Adhesives Research Ltd.
 The Old Exchange, Mill Lane
 Great Dunmow, Essex, UK CM6 1BG
 Phone: +44 (0)1371 856300
 Fax: +44 (0)1371 856380

Adhesives Research Pte. Ltd.
 20 Maxwell Road
 #10-06 Maxwell House
 Singapore 069113
 Phone: +65 6774 9580
 Fax: +65 6777 7261

Adhesives Research Shanghai Representative Office
 Unit 3526A, Level 35 CITIC Square
 1168 West Nanjing Road
 Shanghai 200041, China
 Phone: +86 21 6150 4358
 Fax: +86 21 6135 7120