Product Information

ARclad® 9032

Electrically Conductive Transfer Adhesive

Insight® Adhesives Research

US Patent #5,082,595

PRODUCT DESCRIPTION

ARclad® 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	Polyester Liner
1mil [25 µm]	2 mils [51 µm]

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

* 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)

(Revision – 06-30-06)

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.

DISCLAIMER

AR expressly warrants to Purchaser that its product, under normal and intended use maintenance and storage, is free from defects in workmanship for twelve (12) months from the date of shipment, unless otherwise stated. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES. **AR MAKES NO WARRANTY AS TO EXPERIMENTAL AND DEVELOPMENTAL SAMPLES OR MATERIALS. AR MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** No provisions, representations, diagrams, drawings or pictures contained in any product literature, price list, catalogue, purchase order, product data sheet, order acknowledgment, invoice, delivery ticket, or any other communication by AR, including information on AR's website or representations made by AR's employees or agents, constitute express warranties. Results of tests and recommendations included in communications of AR do not constitute express warranties. SINCE MANY FACTORS MAY AFFECT THE USE AND PERFORMANCE OF AN AR PRODUCT IN A PARTICULAR APPLICATION, INCLUDING, AMONG OTHERS, THE PRODUCT SELECTED FOR USE, THE CONDITIONS IN WHICH THE PRODUCT IS USED, THE TIME AND ENVIRONMENTAL CONDITIONS IN WHICH THE PRODUCT IS EXPECTED TO PERFORM, THE MATERIALS TO BE USED WITH THE PRODUCT, THE SURFACE PREPARATION OF THOSE MATERIALS, AND THE APPLICATION METHOD FOR THE PRODUCT, PURCHASER ACCEPTS RESPONSIBILITY FOR DETERMINING WHETHER AR'S PRODUCT IS FIT FOR A PARTICULAR PURPOSE AND SUITABLE FOR PURCHASER'S METHOD OF APPLICATION. AR retains the right to modify or change its products if in AR's judgment it is advisable.

Purchaser's exclusive remedy and AR's sole obligation for any breach of warranty is limited to, at AR's option, either: 1) replacement of AR's product, or 2) reimbursement of the purchase price of AR's product. **AR DISCLAIMS ANY OTHER OBLIGATION OR LIABILITIES ARISING OUT OF BREACH OF WARRANTY.** AR will not be liable of any loss, damage, expense or consequential, incidental or special damages of any kind.

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
#12-08B Maxwell House
Singapore 069113
Phone: +65 6774 9580
Fax: +65 6777 7261

Adhesives Research Shanghai Representative Office
Suite 3908, Plaza 66 Tower 1
1266 Nanjing West Road
Shanghai, China 200040
Phone: +86 21 61038526
Fax: +86 21 61038527

Adhesives Research GmbH
Stefan-George-Ring 29, D-81929
München, Germany
Phone: +49 (0) 89 930 86 220
Fax: +49 (0) 89 930 51 84