

ARclad[®] 9032

Electrically Conductive Transfer Adhesive



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. All pressure-sensitive tapes require an application surface that is clean and dry. Users should assure the product 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: 1 mil [25 µm]
 Polyester Liner: 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
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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

***All stated values are nominal and should only be used as a guide for selection. They are not specifications.**

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STORAGE AND SHELF LIFE

Unconverted product should be stored at 70°F ± 20°F (21°C ± 11°C) and 50% ± 20% relative humidity, out of direct sunlight. The shelf life of the product is not to exceed 24 months from date of manufacture.

SERVICE TEMPERATURE RANGES

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

Note: The information contained on this data sheet is based upon test results of limited quantities of this material and may be modified by Adhesives Research following additional production experience and evaluation. This data should not be used in preparing specifications. Products identified as developmental may be subject to modification by Adhesives Research, Inc.

(Revised 3 August 2016)

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 Adhesives Research sales representative if you need additional information.

THIS IS NOT AN OFFER

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AR limits the purchaser's remedies in the event of a breach of any warranty. The purchaser's exclusive remedy and AR's obligations for a breach of any warranty shall be as set forth in the Sales Order Acknowledgment.

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