

Product Information Sheet

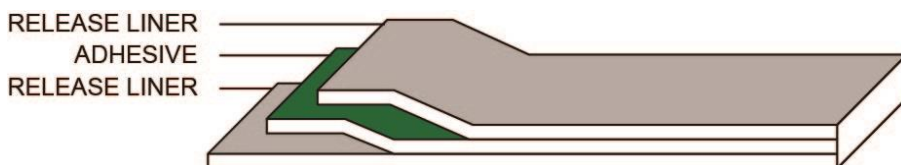
ARflow® 94141 (Developmental)



ARflow® 94141 is an ultra-thin, electrically conductive, chemically-inert pressure sensitive adhesive transfer tape suitable for direct contact with sensitive or corrosive chemistries, including lithium-ion electrolytes.

PRODUCT APPLICATIONS

The typical uses for this product are electrical bonding within electronic devices including batteries, fuel cells, photovoltaics, smart/solar glass, and optical devices. The polyisobutylene-based chemistry is chemically inert and stable in harsh or corrosive environments, including in contact with lithium-ion or other electrolytes.



FEATURES AND BENEFITS

- Chemically inert and resists degradation
- Ultra-thin adhesive film
- High electrical conductivity through the z-axis
- Dual polyester film release liner system for ease of die cutting
- Thin bond line

Product Construction			
	Typical Values*		Description
Liner thickness	2.0 mil	51 µm	Clear PET easy release liner
Adhesive thickness	0.2 mil	5 µm	Conductive PIB rubber adhesive
Liner thickness	2.0 mil	51 µm	Clear PET tight release liner
Total thickness	0.2 mil	5 µm	(Excluding liners)

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

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Technical Properties			
Attribute*	Typical Values*		Test Method*
Peel adhesion on stainless steel (180°, 12 in/min, 1 h dwell)	31 oz/in	8.6 N/25.4 mm	ASTM D3330
Loop tack on stainless steel	16 oz/in	4.4 N/25.4 mm	PSTC 16
Contact resistance through adhesive (23 °C, 1 in ² , 5 psi)	≤ 50 mΩ		ART 3035
Recommended storage of unconverted product	70°F ± 20°F 50% ± 20% RH	21°C ± 11°C 50% ± 20% RH	
Shelf life of unconverted product	Not to exceed one year from date of manufacture		

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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.

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.

THIS IS NOT AN OFFER

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North America – Headquarters

Adhesives Research, Inc.
400 Seaks Run Road
Glen Rock, PA 17327
Phone: +1 (717) 235-7979
Toll-free: +1 (800) 445-6240
Fax: +1 (717) 235-8320

Europe

Adhesives Research Ireland, Ltd.
Raheen Business Park
Raheen, Limerick
V94 VH22 Ireland
Phone: +353 61 300 300
Fax: +353 61 300 700

China

Adhesives Research China Co., Ltd.
Room 2710-2711, Building B
Far Glory International Square
No. 317 Xianxia Road
Shanghai, China 200051
Phone: +86 (21) 6150 4358
Fax: +86 21 6278 5576

Singapore

Adhesives Research PTE Ltd.
1 Paya Lebar Link
#04-01 Paya Lebar Quarter 1
Singapore 408533
Phone: +65 6955 8528
Fax: +65 6777 7261