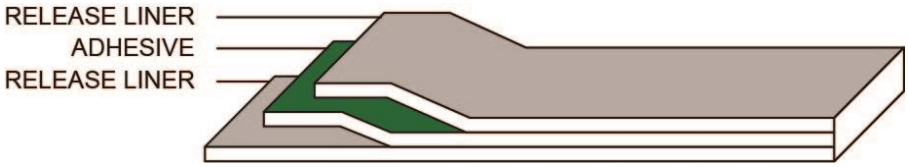
Product Information Sheet
ARflow® 94274 (Developmental)

Adhesives Research®

ARflow® 94274 is an ultra-thin, high shear strength, 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
- High shear strength, even at elevated temperatures
- 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)	12 oz/in	3.3 N/25.4 mm	ASTM D3330
Shear adhesion on stainless steel (70 °C, 0.25 in^2, 250 g)	>5,000 min		ASTM D3654
Loop tack on stainless steel	18 oz/in	5.0 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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DISCLAIMER OF WARRANTIES

AR's warranty on product is limited to the warranty set forth in the Sales Order Acknowledgment. **NOTHING SET FORTH IN THIS PRODUCT INFORMATION SHEET SHALL CONSTITUTE A WARRANTY OF ANY KIND AND EXCEPT AS SET FORTH IN THE SALES ORDER ACKNOWLEDGMENT. UNLESS OTHERWISE STATED IN A SALES ORDER ACKNOWLEDGMENT, AR EXPRESSLY DISCLAIMS ALL WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** No provisions, statements, 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 statements 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. 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; THEREFORE, 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.

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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