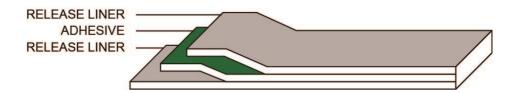


ARclear[®] 44110 is an optically clear moisture barrier pressure-sensitive adhesive (PSA) transfer tape.

PRODUCT APPLICATIONS

The typical use for this product is as a moisture barrier adhesive in various electronics and optical device applications. It is suitable for use in combination with high-barrier films such as inorganically coated plastics. It exhibits good adhesion to a variety of substrates. The adhesive is uncrosslinked and, as such, is not recommended for high-shear and high-temperature applications.



FEATURES AND BENEFITS

- High optical transmission, high clarity, low haze, and non-yellowing
- Optically clear transfer film with good moisture barrier properties
- Hydrophobic adhesive with excellent thermooxidative and UV stability
- Easy, mess-free processing and bonding

Product Construction					
	Typical Values*		Description		
Liner thickness	2.0 mil	51 µm	Clear PET easy release liner		
Adhesive thickness	1.0 mil	25 μm	Optically clear PIB PSA		
Liner thickness	5.0 mil	127 μm	Clear PET tight release liner		
Total thickness	1.0 mil	25 µm	(Excluding liner)		

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

Product Information Sheet ARclear[®] 44110



Technical Properties				
Attribute*	Typical Values*		Test Method*	
Peel adhesion on stainless steel (180°, 6 in/min, 1h dwell)	50 oz/in	14 N/25.4 mm	ASTM D3330	
Peel adhesion on glass (180°, 6 in/min, 1h dwell)	60 oz/in	17 N/25.4 mm	ASTM D3330	
Peel adhesion on polycarbonate (180°, 12 in/min, 1h dwell)	75 oz/in	21 N/25.4 mm	ASTM D3330	
Peel adhesion on PET (180°, 12 in/min, 1h dwell)	68 oz/in	19 N/25.4 mm	ASTM D3330	
Peel adhesion on PMMA (180°, 12 in/min, 1h dwell)	78 oz/in	22 N/25.4 mm	ASTM D3330	
Release of easy liner (180°, 300 in/min)	8 g/2 in		ASTM D5375	
Release of tight liner (180°, 300 in/min)	40 g/2 in		ASTM D5375	
Refractive index	1.52		ASTM D542	
Optical properties	Transmission: 100% Haze: 0.4% Clarity: 99.4%		ASTM D1003	
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			

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



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, lnc.

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

This Product Information sheet ("PI Sheet") is not an offer to sell by Adhesives Research ("AR") and does not contain any binding warranties or terms of sale. While this PI Sheet does contain technical information and general warranty information, this PI Sheet is non-binding and is for information purposes only. If you wish to purchase the product set forth on this PI Sheet ("Product"), or have any questions regarding the warranty or other terms related to this Product, contact AR customer service or a sales representative and they will provide you with AR's terms of sale for the Product in the form of a Sales Order Acknowledgment. AR shall not be bound by any terms or information set forth in this PI Sheet.

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.

ARcare[®], ARclad[®], ARclean[®], ARflow[®], ARclear[®] are registered trademarks of Adhesives Research, Inc. ARseal[™] is a trademark of Adhesives Research, Inc. Adhesives Research, Inc. Adhesives Research^{*} is a registered service mark of Adhesives Research, Inc. for engineering and design services in the field of pressure-sensitive adhesive systems.

©2023 Adhesives Research, Inc. Printed in USA.

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 (28 November 2023)

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

www.adhesivesresearch.com