

Product Information Sheet

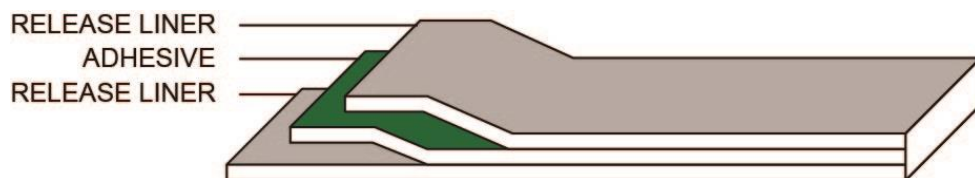
ARclear® 43040 (Developmental)



ARclear® 43040 is an optically clear, high peel, thick silicone pressure-sensitive adhesive (PSA) transfer film.

PRODUCT APPLICATIONS

The typical use for this product is for bonding of flexible-to-flexible or flexible-to-rigid optical components such as backlight, polarizers, filters, retarders and diffusers, and holographic, anti-reflective and hard-coated films used in projection screens, touch screens, LCDs and flat panel displays.



FEATURES AND BENEFITS

- Low haze, high clarity, and high light transmission
- Functional over a broad range of temperatures from -70 °C to over 250 °C
- High adhesion to glass, PMMA, and polarizer substrates
- Environmentally durable – resists temperature extremes, humidity, and UV light
- 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	4.0 mil	102 µm	Silicone optically clear adhesive
Liner thickness	2.0 mil	51 µm	Clear PET tight release liner
Total thickness	4.0 mil	102 µm	(Excluding liner)

*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 to glass (180 °, 12 in/min, 1h dwell)	75 oz/in	20.9 N/25.4 mm	ASTM D3330
Release of easy liner (180°, 300 in/min)	13 g/2 in		ASTM D5375
Release of tight liner (180°, 300 in/min)	30 g/2 in		ASTM D5375
Refractive index	1.41		ASTM D542
Optical properties	Transmission:	100%	ASTM D1003
	Haze:	0.2%	
	Clarity:	99%	
Color (CIE94, D65 illuminant, 10°)	L*:	99.8	ASTM E1331
	a*:	0.06	
	b*:	0.40	
Yellowness Index (YI)	0.78		ASTM E313
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