



Adhesives Research®

Point of Care

Innovative Solutions

A Legacy of Innovation and Custom Creations

For nearly 60 years Adhesives Research has developed and manufactured custom adhesives and coating technologies around the world. Our innovative products are created for a variety of purposes and industries, including in-vitro diagnostic (IVD) applications used in the medical industry.

We offer our customers complete, custom solutions for products through innovative technologies capable of delivering enhanced performances and novel capabilities to a variety of medical devices. Our custom adhesives opportunities include: cover, spacer, hydrophilic, optically clear, dissolvable film, low leachable and electrically conductive tapes.

Cover Tapes

A clear or opaque cover film with excellent sealing and variety of assays designed to go over microfluidic devices.

- Non-migratory and inert adhesives
- White or clear film
- Low autofluorescing adhesives and carrier available
- Excellent bond to low surface energy substrates
- Acrylic and silicone adhesive options available
- Wide operating temperature range (-40°C to 120°C)
- Adhesive resistant to dilute solutions of DMSO, acids, alcohols, organic solvents
- Withstands rapid thermal cycling

Spacer Tapes

A double sided tape with tight thickness control, designed for adhesion to different plastics, metals, and a range of assays.

- Easily die cuttable, non-migratory adhesive
- Polyester or Polypropylene carrier
- Excellent bond to low surface energy substrates
- Acrylic and silicone adhesives available
- Wide operating temperature range (-40°C to 120°C)
- Adhesive resistant to dilute solutions of DMSO, acids, alcohols, organic solvents
- Polyester release liner for clean room use
- Withstands rapid thermal cycling

Optically Clear Tapes

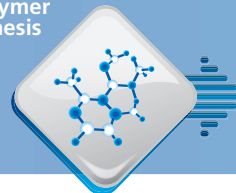
A clear adhesive designed to have environmental durability and clarity for the bonding of displays and touch screens.

- High shear and peel strength
- Low haze, high clarity and high light transmission
- Non-birefringent
- Very broad temperature range
- Low flammability
- High bond levels to many surfaces, including low energy surfaces
- Silicone and Acrylic adhesives options available

Raw
Materials



Polymer
Synthesis



Mixing &
Compounding



Hydrophilic Tapes

An adhesive designed for diagnostics, microfluidic and medical device applications to contain and support biological fluids.

- Clear coating
- Consistent low contact angle
- Stable to a wide array of temperatures and humidity
- Pressure-sensitive adhesive or heat activated adhesive (recommended sealing temperature of 120-150°C, 15 psi)
- Fast and stable capillary fills
- Printable for brand identification
- Wettable to liquids such as water, urine, blood, etc.
- Provides adhesion to polymer and metalized polymer surfaces

Hydrophilic Coatings

A tailorable film designed to manage flow for diagnostics, biological fluid containment, microfluidic and medical devices.

- Consistent low contact angle
- Stable to a wide array of temperatures and humidity
- Excellent die cutting
- Fast and stable capillary fills
- Clear construction for verification of wicking
- Chemical compatibility in biosensors
- Printable for brand identification
- Wettable to liquids such as water, urine, blood, etc.

Low Leachables & Low Outgassing Tapes

Electronically clean adhesives designed to resist environmental aging and bonding for seals, filters, labels and displays.

- Low total VOCs
- Low extractable ions
- Eliminates contamination and labor costs associated with adhesive residue during rework
- High purity, non-corrosive adhesive film
- Compatible with delicate oxidizable metal depositions

Electrically Conductive Tapes

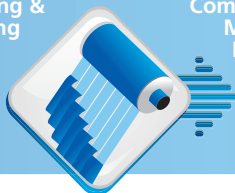
An adhesive with excellent bonding strength and stability designed for a variety of touch screens and conductive surfaces.

- Thin adhesive layer (1 mil – 4 mils)
- Primarily z axis or x-y-z axis options available
- Pressure-sensitive tape format for instant bonding in electrical interconnect applications
- Acrylic binder resin for good thermal, chemical and oxidative stability
- Tape thickness and flexibility conforms to the topography of "imperfect surfaces" providing excellent contact

Casting & Drying



Slitting & Packaging



Complete Testing of Raw Materials, Work in Process, Finished Roll Goods



Ship Roll Goods for Die-cutting & Packaging



POC Tapes and Coating Products

Product Number	Adhesive	Carrier	Liner	Total Thickness (w/o liner)	Adhesive Type	Construction/ Conductivity
Cover Tapes						
7759	AS-110	Clear PET	50μ clear PET	56μ	Acrylic	S/F
7815	AS-110	Clear PET	50μ clear PET	75μ	Acrylic	S/F
8259	AS-110	White PET	50μ clear PET	157μ	Acrylic	S/F
8565	AS-110	White PET	50μ clear PET	279μ	Acrylic	S/F
90697	SR-25	BOPP	50μ clear PET	97μ	Silicone	S/F
Spacer Tapes						
8939	AS-110	Clear PET	50μ clear PET	125μ	Acrylic	D/F
90445Q	AS-110	Clear PET	50μ clear PET	81μ	Acrylic	D/F
90106NB	MA-69	Clear PET	50μ clear PET	142μ	Hybrid	D/F
92712	MA-93	Clear PET	50μ clear PET	48μ	Acrylic	D/F
90880	SR-25	BOPP	50μ clear PET	142μ	Silicone	D/F
92848	MA-77	Clear PET	50μ clear PET	96μ	Heat seal	D/F
Optically Clear Tapes						
93495	SR-29	-	50μ clear PET	38μ	Silicone	T/F
8932EE	SR-22	-	50μ clear PET	38μ	Silicone	T/F
92524	AS-200	-	50μ clear PET	25μ	Acrylic	T/F
92734	AS-221	-	50μ clear PET	25μ	Rubber	T/F
Low Leachables & Low Outgassing Tapes						
90176	AS-144	Clear PET	165μ Paper/50μ PET	125μ	Acrylic	D/F
90178	AS-144	Clear PET	165μ Paper/50μ PET	90μ	Acrylic	D/F
8915W6970	AS-132	White PET	37μ PET / 50μ PET	150μ	Acrylic	D/F
93530	AS-132	-	50μ PET	25μ	Acrylic	T/F
Electrically Conductive Tapes						
8001	EC-2	-	157μ Paper	109μ	Acrylic	x-y-z
8006	EC-2	-	50μ PET	25μ	Acrylic	x-y-z
9032	EC-27	-	50μ PET	25μ	Acrylic	z
90366	EC-2	-	50μ PET	109μ	Acrylic	x-y-z
Hydrophilic Tapes						
Heat Activated Hydrophilic Tapes						
90128	HY-9	125μ Clear PET	50μ PET	160μ	Polyester (LCA)	S/F
90368	HY-10	75μ Clear PET	50μ PE	100μ	Polyester (LCA)	S/F
92804	HY-25	75μ Clear PET	50μ PET	95μ	Polyester (MCA)	S/F
93234	HY-33	75μ Clear PET	50μ PET	100μ	Acrylic (LCA)	S/F
Pressure Sensitive Hydrophilic Tapes						
93049	HY-32	75μ Clear PET	50μ PET	100μ	Acrylic (LCA)	S/F
93450	HY-32	N/A	50μ PET	25μ	Acrylic (LCA)	T/F
Hydrophilic Coatings						
8586	MA-55	75μ Clear PET	None	62μ	Polyester (LCA)	S/F, SW
93025	HY-10	100μ Clear PET	37.5μ PET	112μ	Polyester (LCA)	S/F
93781	HY-47	100μ Clear PET	63μ Blue PE	112μ	Polyester (LCA)	S/F

T/F - Transfer film (adhesive between release liners)

S/F - Single face tape

SW - Self-Wound

D/F - Double face tape

LCA - Low Contact Angle

MCA - Medium Contact Angle

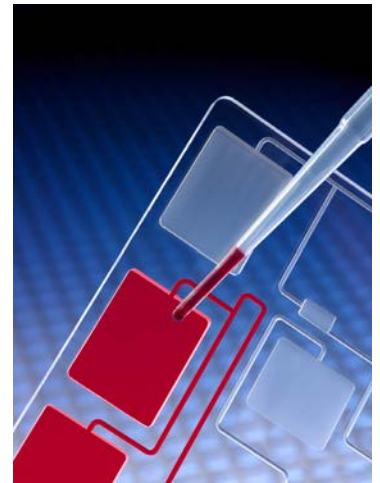
ARflow[®] Hydrophilic Adhesives and Coatings

Efficient fluid transport. Reduced analysis times.

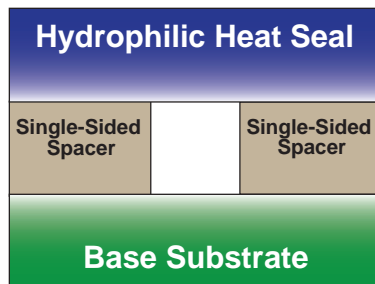
ARflow[®] hydrophilic technologies from Adhesives Research reduce the surface tension of biological fluids to allow for rapid and consistent wicking in diagnostic devices. ARflow is designed for use in diagnostic devices such as blood coagulation monitors, blood glucose, point-of-care tests, environmental test kits and biotechnology applications.

ARflow hydrophilic technologies provide tailorable flow rates and contact angles ranging <math><10^\circ</math> to 60° to enable stable, passive fluid transport. These adhesives and coatings are compatible with reagent chemistries, biological samples and are non-interfering with test results.

The ARflow product line includes heat seal adhesives, pressure-sensitive adhesives (PSAs) and non-adhesive coatings. Our adhesives are formulated to bond to low-surface energy and metalized substrates commonly used in diagnostic devices and offer long-term stability in high-temperature and humidity environments.

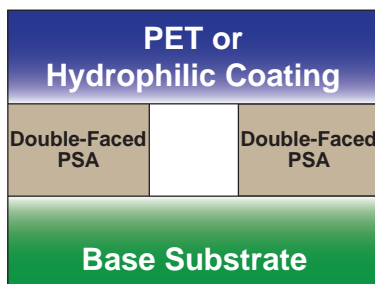


Benefits of ARflow Products:



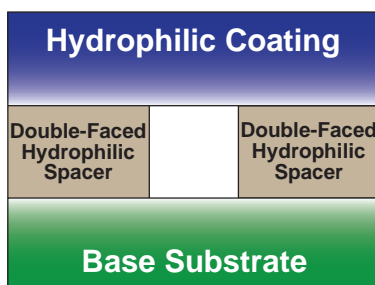
Hydrophilic Heat Seal Adhesives

- Formulated as non-tacky or tacky adhesives
- Clean die-cutting formulations
- Tailorable bonding
- Bonds to polymeric substrates
- Multiple chemistries available
- Low cold flow for dimensional stability



Hydrophilic Pressure-Sensitive Adhesives (PSAs)

- Instant tack forms permanent bonds with minimal pressure
- Ideal for chemistries that are sensitive to heat exposure
- Bonds to polymeric substrates
- Tailorable adhesion
- Inherently and uniformly hydrophilic on all surfaces
- Low cold flow for dimensional stability
- Die-cuttable
- Low fluorescing chemistries



Hydrophilic Coatings

- Non-tacky coatings can be applied to a range of rigid substrates
- Ideal as a top component for quick capillary flow
- Low contact angle
- Designed for use in combination with a PSA spacer tape



Adhesives Research, Inc.

Corporate Office

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

Adhesives Research Ireland Ltd.

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

Adhesives Research Ltd. United Kingdom

Phone: +44 (0) 1371 878187

Adhesives Research PTE Ltd.

60 Paya Lebar Road
#04-04 Paya Lebar Square
Singapore 409051
Phone: +65 6774 9580
Fax: +65 6777 7261

Adhesives Research China Co., Ltd.

Room 2710-2711, Building B
Far Glory International Square
No. 317 Xianxia Road
Changning District
Shanghai, China 200335
Phone: +86 21 6150 4358
Fax: +86 21 6278 5576

DISCLAIMER

AR expressly warrants to Purchaser that its product, under normal and intended use, maintenance and storage, is free from defects in workmanship for twelve (12) months from the date of shipment, unless otherwise stated. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES. AR MAKES NO WARRANTY AS TO EXPERIMENTAL AND DEVELOPMENTAL SAMPLES OR MATERIALS. AR MAKES NO WARRANTY 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 set forth in the Sales Order Acknowledgment.

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

ARflow®, is a registered trademark of Adhesives Research.

Adhesives Research® is a registered service mark of Adhesives Research, Inc., for engineering and design services of pressure-sensitive adhesive systems.

©2018 Adhesives Research, Inc. Printed in USA.

www.AdhesivesResearch.com

[LinkedIn](https://www.linkedin.com/company/adhesivesresearch) /AdhesivesResearch

info@arglobal.com

Pub Date: 02/2019

A trusted global leader in developing and manufacturing pressure-sensitive adhesives, specialty films, coatings, laminates, release liners.



Adhesives Research®

www.adhesivesresearch.com