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 <10° 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
- Low fluorescing chemistries

**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
# ARflow® Hydrophilic Technologies

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| ARflow® 92804 | 3 mil clear flexible polyester film coated on one side with a hydrophilic heat sealing adhesive. | • Roll format  
  • Flexible tape  
  • Hydrophilic surface  
  • Heat-activated adhesive  
  • Smooth coating  
  • Easily die cut | • Facilitates design options  
  • Excellent conformability  
  • Wettable to biological fluids  
  • Provides adhesion to polymer and metalized polymer surfaces  
  • Good aesthetic quality | Assemblies of in-vitro diagnostics and membrane-based immunoassay products where enhanced hydrophilic performance is required. |
| ARflow® 93234 | 3 mil clear flexible polyester film coated on one side with a hydrophilic heat sealing adhesive. | • Roll format  
  • Flexible tape  
  • Hydrophilic surface  
  • Heat-activated adhesive  
  • Smooth coating  
  • Easily die cut | • Facilitates design options  
  • Excellent conformability  
  • Wettable to biological fluids  
  • Good green strength; also provides good adhesion to polymer and metalized polymer surfaces  
  • Good aesthetic quality  
  • Excellent cohesive strength | Assemblies of in-vitro diagnostics and membrane-based immunoassay products where enhanced hydrophilic performance is required.  
 Applications requiring minimal cell lysis and/or requiring non-specific binding. |
| **Hydrophilic Pressure-Sensitive Adhesive (PSA)**                                                                                                                 |
| ARflow® 93049 | 3 mil clear flexible plastic film coated on one side with a hydrophilic PSA. | • Environmentally stable  
  • Roll format  
  • Flexible tape  
  • Hydrophilic surface  
  • PSA  
  • Smooth coating  
  • Excellent die cutting | • Facilitates design options  
  • Excellent conformability  
  • Wettable to biological fluids  
  • Provides instant adhesion to polymer and metalized polymer surfaces  
  • Good aesthetic quality | Assemblies of in-vitro diagnostics and membrane-based immunoassay products where enhanced hydrophilic performance is required.  
 Applications requiring minimal cell lysis and/or requiring non-specific binding. |
| **Hydrophilic Film Coatings**                                                                                                                                  |
| ARflow® 93127 | 3 mil clear self-wound polyester film coated on one side with an advanced hydrophilic coating. | • Clear coating  
  • Printable backside  
  • Thermally stable  
  • Consistent  
  • Chemically stable  
  • Prevents fogging  
  • Dimensionally stable | • Fast, stable capillary fills  
  • Clear construction for verification  
  • Biosensor chemical compatibility  
  • Easily bonds to PSA spacer tapes  
  • Stable up to 125°C for ink curing  
  • Printable PET backside | Backside printable lid stock for in-vitro diagnostics where enhanced hydrophilic performance is required.  
 Designed for assembly with PSA spacer tapes. |
| ARflow® 93210 | 4 mil clear polyester film coated on one side with an advanced hydrophilic coating and protected by a clear polyester liner. | • Clear coating  
  • Printable backside  
  • Easy liner removal  
  • Consistent  
  • Chemically stable  
  • Prevents fogging  
  • Dimensionally stable | • Fast, stable capillary fills  
  • Clear construction for verification  
  • Easily bonds to PSA spacer tapes  
  • Biosensor chemical compatibility  
  • Printable PET backside | Printable lid stock for in-vitro diagnostic devices requiring hydrophilic properties where extra protection of the hydrophilic side is needed, enhanced wettability to fluids is required, and for assembly with PSA spacer tapes. |

Call us for samples and to discuss the benefits of our hydrophilic technologies for your next project.

www.adhesivesresearch.com