PRODUCT DESCRIPTION

ARclean® 90178 is an acrylic acid free acrylic adhesive double side coated polyester film tape designed for use in electronics applications requiring low corrosion resistance.

FEATURES

- Acrylic-acid free adhesive system
- Low VOC outgassing
- Low extractable anions
- Polyester film carrier
- Polycoated kraft, lay flat liner
- Withstands extremes in temperature and humidity
- Supplied with two release liners

BENEFITS

- Minimizes corrosion of delicate oxide (ITO) or conductive surfaces
- Eliminates fogging and oxidation of conductive surfaces
- Enhances environmental stability
- Consistent caliper for spacer application
- Film carrier provides dielectric barrier between bonded surfaces
- Easy to die cut and apply

PRODUCT APPLICATIONS

Suggested for bonding electronic surfaces sensitive to fogging, oxidation and corrosion and for perimeter spacer bonding system of touch screens and similar electronic devices. All pressure-sensitive tapes require an application surface that is clean and dry. Users should assure the product meets the specific needs of their application(s). Adhesives Research can tailor the product to meet the needs of specific applications as requested by customers.

PRODUCT PROFILE AND DIAGRAM – Typical Values*

<table>
<thead>
<tr>
<th>Layer</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polycoated Kraft Liner:</td>
<td>6.5 mils (165µm)</td>
</tr>
<tr>
<td>ARclean® Adhesive (AS-144):</td>
<td>1.5 mils (38µm)</td>
</tr>
<tr>
<td>Polyester Carrier Film:</td>
<td>0.5 mils (12µm)</td>
</tr>
<tr>
<td>ARclean® Adhesive (AS-144):</td>
<td>1.5 mils (38µm)</td>
</tr>
<tr>
<td>Clear Polyester Liner:</td>
<td>2.0 mils (50µm)</td>
</tr>
<tr>
<td>Total:</td>
<td>12.0 mils nominal (303µm)</td>
</tr>
</tbody>
</table>

Reference Test Methods: PSTC-133, ASTM D-1000, ART #5006

ADHESIVE PERFORMANCNE PROPERTIES – Typical Values*

180° Peel Adhesion/12"min. 
5"SS – 30 oz./in.

Reference Test Methods: PSTC 101, ASTM D-3330, ART #1005

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

Unconverted product should be stored at 70°F ± 20°F (21°C ± 11°C) and 50% ± 20% relative humidity, out of direct sunlight. The shelf life of the product is not to exceed one year from date of manufacture.

SERVICE TEMPERATURE RANGE

Recommended Minimum Application Temperature: 50°F (10°C)
Service Temperature Range: -40°F - 300°F (-40°C - 149°C)

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 laminating 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 Adhesives Research sales representative if you need additional information.

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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