ARclad® 8458
Double-Coated Film Bonding Tape

PRODUCT DESCRIPTION

ARclad® 8458 is a silicone double faced adhesive with a polyetherimide carrier film designed for use in very high temperature and very low temperature applications with excellent long term stability.

FEATURES

- Polyetherimide film
- High performance pressure-sensitive silicone adhesive
- Tear resistant release liner

BENEFITS

- Outstanding high/low temperature performance
- Easy to die cut and apply
- Excellent UV, moisture and chemical resistance

PRODUCT APPLICATIONS

Suggested for flexible circuits, gaskets and flexible heaters where a wide service temperature range is required. 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

<table>
<thead>
<tr>
<th>Clear PET Release Liner</th>
<th>S/F Liner</th>
<th>2.0 mils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicone Adhesive</td>
<td>1 mil Polyetherimide Film</td>
<td>Tape Composite</td>
</tr>
<tr>
<td>Silicone Adhesive</td>
<td>Clear PET Release Liner</td>
<td>S/F Liner</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Test Methods: PSTC-133, ASTM D-1000

ADHESIVE PERFORMANCE PROPERTIES - Typical Values*

180° Peel Adhesion/5 min. Dwell/12”/min.
SS - 65 oz./in.

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

STATIC SHEAR – Typical Values*

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Area</th>
<th>Load</th>
<th>Minutes to Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>72°F</td>
<td>½” x ½”</td>
<td>1000 g.</td>
<td>&gt;24 hours</td>
</tr>
</tbody>
</table>

Test Methods: PSTC-107, ART #2011

*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.
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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.

(Revised 2 March 2015)

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 Adhesives Research sales representative if you need additional information.

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