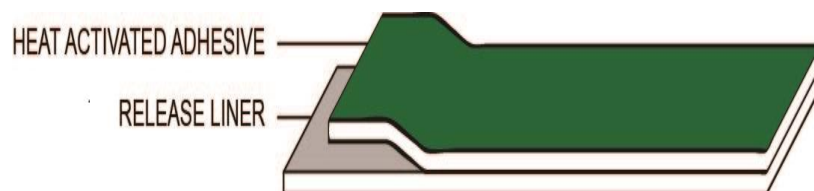


**ARcare® 93400 is a highly conductive heat seal adhesive transfer tape. The adhesive resists creep and maintains excellent electrical and adhesive properties at elevated temperatures, in humid environments, and upon cyclical aging conditions.**

### **PRODUCT APPLICATIONS**

The typical use for this product is for EMI/RF grounding applications, heat sink bonding, and as an alternate to soldered or fused connections.



### **FEATURES AND BENEFITS**

- Electrically and thermally conductive adhesive
- Suitable for small contact applications (6 mm X 6 mm)
- Metal oxide penetration for direct electrical contact with metal substrates
- Adhesion to a wide range of substrates including Kapton, tin, copper, aluminum, stainless steel, ITO and other metal substrates
- Excellent thermal and chemical resistance
- Stable electrical and mechanical performance through elevated temperature and thermal cycling exposure
- Thin consistent bond line
- Easy to handle and convert into preforms via common techniques including laser-cutting and die-cutting

Product Construction			
	Typical Values*		Description
Release liner thickness	2.0 mil	51 µm	Clear double-faced PET release liner
Adhesive thickness	1.4 mil	35 µm	Highly conductive heat seal
Total thickness	1.4 mil	35 µm	(Excluding liners)

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

## APPLICATION GUIDELINES

Application conditions must be optimized for each specific application and substrate. For initial conditions, Adhesives Research recommends a two-step process. First, heat tack the adhesive to the substrate using 70 lb/in<sup>2</sup> pressure for 5 s at 100 °C, then heat in an oven or autoclave for 30 min at 145 °C for full cure. If heat tacking is not an option, adhesive may be adhered to product under pressure for 30 min at 145 °C. Optimal application conditions should ideally be identified via DOE.

Technical Properties			
Attribute*	Typical Values*		Test Method*
T-Peel adhesion on copper foil (12 in/min, 35 µm copper foil, 30 psi lamination / 30 min cure at 145 °C)	35 oz/in	9.7 N/25.4 mm	ASTM D1876
Contact resistance through adhesive (23 °C, 11.5 psi, 1" x 1" gold-plated electrodes)	< 10 mΩ		ART 3035
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 12 months from date of manufacture		

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

# Product Information Sheet

## ARcare® 93400



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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