# **ARclear® 44000 Series OCAs Moisture Barrier Applications**



ARclear® 44000 Series products are optically clear, silicone pressuresensitive adhesive transfer films.

## **Applications for ARclear® 44000 Series OCA transfer tapes:**

**Moisture barrier** protection for use in various electronics (such as battery, solar, smart and glass) and optical device applications and are suitable for use in combination with high barrier films such as inorganically coated plastics. These products exhibit good adhesion to a variety of substrates such as stainless steel, glass, polycarbonate, PET, and PMMA.









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# **ARclear® 44000 Series OCAs Moisture Barrier Applications**



# **Moisture Barrier OCAs**

- Inert, non-reactive polyisobutylene chemistry enables direct contact with sensitive components.
- Optically clear with excellent thermoxidative and UV stability.
- Suitable for edge sealing and full encapsulation.
- Available in 12.5 and 25 micron thicknesses.

#### **EDGE SEALING & MOISTURE BARRIER PROTECTION**

Product	Description	Construction	1st Release Liner (Type/ Thickness)	Adhesive (Type/ Thickness)	2nd Release Liner (Type/ Thickness)	"Peel Adhesion (N/25.4 mm)"	Moisture permeability (g-mil/ m2-day)
ARclear® 44005 (formally ARcare® 93453)	Moisture barrier adhesive with strong adhesion to various substrates; Chemically inert with excellent thermo-oxidative and UV stability	Π	Clear/ PET/51 μm	Rubber/13 μm	Clear PET/51 μm	6 (Glass) / 13 (PC)	2.2
ARclear® 44010 (formally ARcare® 92734)	Moisture barrier adhesive with strong adhesion to various substrates; Chemically inert with excellent thermo-oxidative and UV stability	Π	Clear/ PET/51 μm	Rubber/25 μm	Clear PET/51 μm	17 (Glass) / 18 (PC)	2.2
ARclear® 44110 (formally ARcare® 93378)	Moisture barrier adhesive with strong adhesion to various substrates; Chemically inert with excellent thermo-oxidative and UV stability	тт	Clear/ PET/51 μm	Rubber/25 μm	Clear PET/127 μm	17 (Glass) / 21 (PC)	2.2



# Types of Tape Construction

## **Transfer Tape (TT)**

Unsupported adhesive is coated directly onto a release liner, allowing transfer films to be the most flexible and conformable of all bonding systems.

- Vibration damping
- ✓ Bonds with consistently thin line
- High strength bonding to a variety of industrial substrates
- Conforms well to irregular surfaces

### **Single-Coated Tape (SCT)**

Single-coated tapes consist of a backing that is coated on one side with an adhesive. Single-coated tapes are available either in selfwound rolls or with a release liner for ease of application.

- Ideal for over-lamination
- Protecting
- Energy management

### **Double-Coated Tape (DCT)**

Double-coated tapes have a carrier that is coated on both sides with an adhesive, eliminating heat and solvent cure cycles. The instant bonding capabilities of double-coated tapes make them very conductive to automation and high-speed processing.

- Offers ease of handling
- Bonding rigid materials to irregular surfaces
- Compensates for thermal expansion
- Reduces sound, shock, and vibration
- Allows use of two different adhesives per application

#### **Heat-activated Film Tape**

Heat-activated film tapes require heat and pressure to achieve final bonding to any surface.

- Ideal for plasticized materials
- ✓ High ultimate bonding strength
- Conforms to irregular or textured surfaces

## **High-performance Thin Foam Tape**

High-performance thin foam tape is designed for mounting smart devices and other components in various electronics applications.

- Fill narrow gaps
- Excellent impact resistance
- Distribute stress uniformly over the bonded area













## **About Adhesives Research:**

Adhesives Research is a permanently independent developer and manufacturer of adhesives and coatings for various markets.

We utilize our material knowledge, polymer synthesis/formulation expertise, and versatile manufacturing capabilities to supply key components to the industry. We offer robust products and technologies and can also rapidly customize to meet the specific needs of an application.

Headquartered in Glen Rock, PA. Adhesives Research has also sales and manufacturing facilities in Ireland and sales offices in China and Singapore.

To learn more information about how Adhesives Research can help solve tape and materials engineering challenges, contact us today.



#### 2023, Adhesives Research, Inc.

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#### North America – Headquarters

### Adhesives Research, Inc. 400 Seaks Run Road Glen Rock, PA 17327 Phone: +1 (717) 235-7979

Fax: +1 (717) 235-8320

Toll-free: +1 (800) 445-6240

#### Europe

# Adhesives Research Ireland, Ltd.

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

Fax: +353 61 300 700

#### China

# Adhesives Research China Co., Ltd.

Room 2710-2711, Building B Far Glory International Square No. 317 Xianxia Road Shanghai, China 200051 Phone: +86 (21) 6150 4358

Fax: +86 21 6278 5576

#### Singapore

# Adhesives Research PTE Ltd.

1 Paya Lebar Link #04-01 Paya Lebar Quarter 1 Singapore 408533 Phone: +65 6955 8528

www.adhesivesresearch.com