

ARclean® W-4013 is a 3 mil (76 µm) clear polyester release liner with an easy release, thermally cured, and solventless silicone coating on one side. The release coating on ARclean® W-4013 is formulated and designed to be ultra-clean and have ultra-low extractables.

## PRODUCT APPLICATIONS

The typical use for this product is for support and protection of pressure-sensitive adhesives (PSAs) requiring easy release with practically zero extractable silicone. ARclean® W-4013 is ideally suited for applications in medical and electronics where ultra-low contamination is required, including internal hard disc drive applications.

## FEATURES AND BENEFITS

- *Ultra-low* extractable silicone surface prevents silicone contamination
- Stable release properties, no “lock-up”, and consistent release force over time
- Excellent thermal stability, aging resistance, and anchorage to the polyester base film
- Green, environmentally friendly, solvent-free coatings
- Free of PFAS (per- and polyfluoroalkyl substances)
- Suitable for indirect skin and food contact, US FDA Drug Master File (21 CFR)
- Compatible with clean room applications
- Retains adhesion and backside printability without silicone contamination



# Product Information Sheet

## ARclean® W-4013



Technical Properties			
Attribute*	Typical Values*		Test Method*
Liner release <sup>1</sup>	10 grams/2"		180 degree, 300 ipm
Extractable Silicone	Release Side	5 ng/cm <sup>2</sup> (Range <20 ng/cm <sup>2</sup> )	FTIR Extractable Silicones
	Back Side	5 ng/cm <sup>2</sup> (Range <20 ng/cm <sup>2</sup> )	
Ionic Contamination Specification Limits (µg/cm <sup>2</sup> )	≤0.05 - Fluoride, Chloride, Nitrite, Bromide, Nitrate, Phosphate, Sulfate, ≤0.20 - Total Anions (7) ≤0.16 - Ammonium, ≤0.20 - Total Cations (6)		Ion Chromatography
Recommended storage of unconverted product	70°F ± 20°F 50% ± 20% RH	21°C ± 11°C 50% ± 20% RH	
Core type†	Fiber		
Wind†	Release coated side in		
Shelf life of unconverted product	Not to exceed two years from date of manufacture		

<sup>1</sup>Utilizing AR EL-8883 acrylic test tape.

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

†Reflects master roll conformation.

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.

#### STORAGE OF LINERS

Customers should be aware of specific product shelf life. Shipping and storage conditions affect shelf life. The optimum storage temperature is 70°F (21°C). Cool, dry storage is recommended.

Consult your Adhesive Research sales representative if you need additional information.

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