

AUTOSTAT AHU

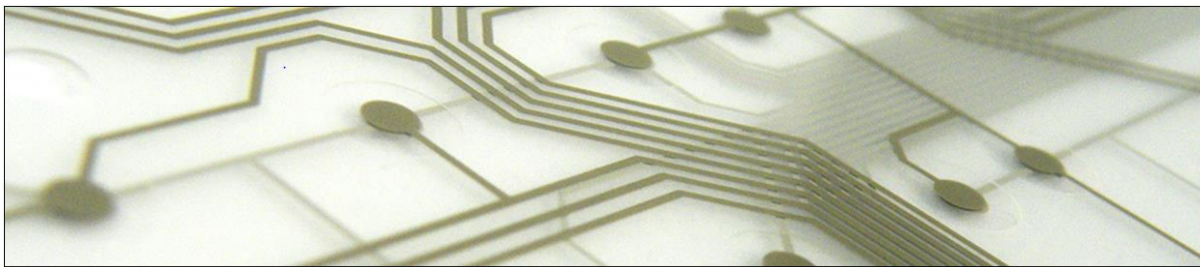
Hazy, Non-primed Polyester Film with Low Residual Heat Shrinkage

PRODUCT DESCRIPTION

The **Autostat** range of polyester* films are heat-stabilised to give low residual shrinkage at elevated temperatures. This is essential when tight registration tolerances need to be maintained during multiple printing operations.

Autostat AHU is a high quality hazy heat stabilized polyester film, with excellent surface slip properties for excellent sheet handling, and is available in sheets and rolls with tight dimensions and squareness tolerance.

Applications include flexible circuitry, membrane switch circuitry, flexible flat cables, sensors, and RFID antennae.



* The term polyester is the generic term for a number of different polymers, of which polyethylene terephthalate (PET) is the most common. PET is used polyester products.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

PRODUCT RANGE

Product	Gauge	Version
Autostat AHU – hazy polyester film with low residual shrinkage at elevated temperatures	75 µm	AHU3
	100 µm	AHU4
	125 µm	AHU5
	175 µm	AHU7
	250 µm	AHU10

TYPICAL PROPERTIES

Property	Typical Value	Test Method
Haze ¹	50 to 100%	ASTM D1003
Tensile strength at break ¹	180 to 220 N / mm ²	ASTM D882
Breakdown Voltage ¹ AHU3 AHU4 AHU5 AHU7 AHU10	10 kV 11.75 kV 13.5 kV 17.5 kV 19.0 kV	ASTM D149
Dimensional stability ^{2,3} (Thickness ≤ 75 µm)	MD ± 0.5% max @ 150 °C / 30 min TD ± 0.1% max @ 150 °C / 30 min	Test method 094
Dimensional stability ^{2,3} (Thickness ≥ 125 µm)	MD ± 0.2% max @ 150 °C / 30 min TD ± 0.08% max @ 150 °C / 30 min	
Thickness all grades ²	± 5% of gauge to nearest whole µm	Test method PLAWP 003
Recommended maximum processing temp.	150 °C	Test method 012
Chemical resistance	Chemical resistance of polyester is generally good but has not been extensively tested for circuitry applications	

Note: All evaluation results are obtained from lab produced samples at MacDermid Alpha Electronics Solutions. They are for general guidance only and do not represent the final product's properties.

¹ Data derived from base film manufacturer's literature

² Specification value

³ For details of test method, please contact MacDermid Alpha Electronics Solutions

PRIMER

Autostat AHU is non-primed polyester.

Please select inks designed for use with non-primed polyester.

SHELF LIFE & STORAGE CONDITIONS

The recommended shelf life is 36 months from the date of manufacture. MacDermid Alpha Electronics Solutions guarantees a minimum remaining shelf life of 8 weeks at the time of despatch.

The recommended shelf life represents the maximum processing lifetime of the product from the date of manufacture when stored correctly and in unopened packaging.

The following storage conditions are recommended:

Storage Conditions	
Temperature	15 to 25 °C
Relative Humidity	50 to 65%
Packaging	Store in original protective packaging Once the packaging has been opened, the processing lifetime can be compromised due to air ingress, contamination, or UV light
Moisture	Store away from water sources
Chemicals	Keep away from aggressive solvents
Stacking	For material $\leq 250 \mu\text{m}$ thick, 100 sheet packs should be stacked no more than 10 packs high

IMDS ID-No

By arrangement with our regulatory affairs team.

SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use.

Safety Data Sheets are available.

WASTE TREATMENT

Prior to using any recommendations or suggestions for waste treatment, the user is required to know the appropriate local/state/federal regulations for on-site or off-site treatment which may require permits. If there is any conflict regarding our recommendations, local/state/federal regulations take precedent.

CONTACT INFORMATION

To confirm this document is the most recent version, please contact

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US +1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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