

AUTOSTAT CUS

Product Data Sheet

Clear, Slip Treated Polyester Film with Low Residual Heat Shrinkage

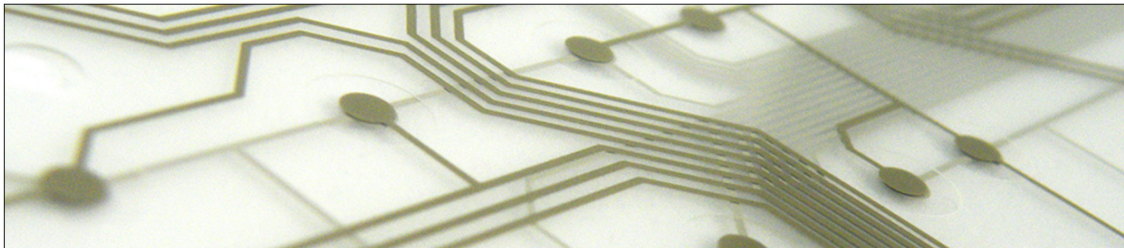


PRODUCT DESCRIPTION

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 CUS is a high quality, clear, heat stabilised polyester film, with a slip treatment on both sides for excellent film handling characteristics. It is available in sheets and rolls, with tight dimension and squareness tolerance, and excellent lay flat for accurate print registration.

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



*The term polyester is the generic term for several different polymers, of which polyethylene terephthalate (PET) is the most common. PET is used in MacDermid Enthone Industrial Solutions polyester products.

PRODUCT RANGE

Product	Gauge	Version
Autostat CUS – clear polyester film with low residual shrinkage at elevated temperatures	125 µm	CUS5



TYPICAL PROPERTIES

Property	Typical Value	Test Method
Haze ¹	1.6%	ASTM D1003
Tensile strength at break ¹	200 N / mm ²	ASTM D882
Elongation at break ¹	142%	ASTM D882
Roughness (Ra) ¹	9 nm	DIN 4768
Dimensional stability ^{2,3}	MD ± 0.2% max @ 150 °C / 30 min TD ± 0.08% max @ 150 °C / 30 min	Test Method 094
Thickness all grades ²	± 5% of 125µm 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 Enthone Industrial Solutions. They are for general guidance only and do not represent the final product's properties.

¹Data derived from base film manufacturer's literature

²Specification value

³For details of test method, please contact MacDermid Enthone Industrial Solutions

PRIMER

Autostat CUS is slip-treated only.

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

SHELF LIFE & STORAGE CONDITIONS

The recommended shelf life is 36 months from date of manufacture. MacDermid Enthone Industrial Solutions guarantee a minimum remaining shelf life of 8 weeks at the time of despatch.

The recommended shelf life represents the maximum processing life time 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 °C 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

IMDS ID-No

By arrangement with our regulatory affairs team.



SAFETY & WARNING

MacDermid Enthone Industrial Solutions recommends 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 from MacDermid Enthone Industrial Solutions.

WASTE TREATMENT

Prior to using any recommendations or suggestions by MacDermid Enthone Industrial Solutions 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 is the most recent issue, please contact us:

IndustrialFilms@macdermidenthone.com

Americas 245 Freight Street Waterbury, CT 06702, USA (800) 323 0632	Europe & rest of the world Grove Road, Wantage, Oxon OX12 7BZ, UK +44 (0) 1235 771111	Asia 26 Tuas West Road Singapore 638382 +65 6862 3327
---	---	---

Website: industrial.macdermidenthone.com

The information and recommendations in this publication are believed to be accurate and are offered in good faith. Suggestions concerning uses and applications are only the opinion of MacDermid Autotype Limited and/or its affiliates and related entities (referred to herein as "MacDermid") and users should carry out their own testing procedures to confirm suitability for their purposes. Except in case of death or personal injury caused by the materials, MacDermid MAKES NO WARRANTY OF ANY KIND AND EXCLUDES ANY STATUTORY WARRANTY EXPRESS OR IMPLIED other than that materials conform to their current applicable standard specifications. Statements herein therefore should not be construed as guarantees of satisfactory quality or fitness for purpose unless expressly prohibited by compulsory law provisions. The responsibility of MacDermid for claims arising out of breach of guarantee, negligence, strict liability or otherwise is limited to the purchase price of the material. Suggestions concerning working practices and procedures are based on the practices adopted by existing users of the products and are made in good faith. IT IS THE RESPONSIBILITY OF THE USER TO ENSURE THAT ALL RELEVANT HEALTH AND SAFETY LAWS AND REGULATIONS ARE COMPLIED WITH. MacDermid does not provide any advice on such laws and regulations and accepts no responsibility, express or implied, for breach of such regulations.

WARNING: Nothing in this guide or in these technical specifications should be construed to imply or suggest that the user employ operations or create articles, which would infringe any patents belonging to third parties. It is the customer's responsibility to ensure that its operations, the conditions of processing, and articles of manufacture do not infringe the foregoing patents, or any third-party patents. MacDermid does not accept responsibility for any infringement of intellectual property rights of third parties.