

Technical data sheet



Product: 5557

Manufacturer: 3M DEUTSCHLAND GMBH

Product group: ELEKTRO

Article group: KLEBEBAND

Download: 10.03.2026

3M™ WATER CONTACT INDICATOR TAPE 5557

This data sheet was provided to you by Tewipack Uhl GmbH. The company tewipack Uhl GmbH assumes no responsibility for the topicality and the Accuracy of the information contained. The properties of the products can vary due to various influences such as composition and condition of the Substrate, impurities in or on the substrate, temperature and humidity at the Change storage and environmental conditions during use. Using this product in combination with other material, the customer is responsible for to check through our own tests whether the product is suitable for the planned combination and whether this combination delivers the expected results

Tewipack Uhl GmbH
Industriestraße 15
D-75382 Althengstett

Telephone:
+49(0)7051/9297-0
Fax:
+49(0)7051/9297-99

E-Mail:
info@tewipack.de
Website:
www.tewipack.de

Managing director:
Alexander Uhl,
Michael Uhl
HRB 330424
Amtsgericht
Stuttgart

Bank details:
Sparkasse
Sindelfingen
Pforzheim
Calw
BLZ 666 500
85
Konto 17 787

Commerzbank
Sindelfingen
BLZ 603 400 71
Konto 8 001 166

Vereinigte
Volksbank AG
Böblingen
BLZ 603 900 00
Konto 80 089
003

Postbank
Stuttgart
BLZ 600 100
70
Konto 146
294 708

3M™ Water Contact Indicator Tape 5557

Product Description

3M™ Water Contact Indicator Tape 5557 is a 10.2 mil (259 micron) thick tape that changes color from white to red upon contact with water. It is designed to withstand heat and humidity aging without giving water indications. The tape permanently changes from white to red upon direct water contact.

Key Features

- Highly absorbent, paper backing to transport water to show indication
- Does not falsely indicate water contact in high humidity exposures
- Performance not degraded by high humidity exposure
- Printable top layer by thermal transfer, flexographic or screen-printing methods
- Easily die cuttable with rotary die cutting process
- Very high bond strength adhesive to most surfaces, including low surface energy plastics
- UL-969 compliant

Product Construction/Material Description

PET Top Film – permanent
Absorbent indicator layer
High performance acrylic adhesive
PET release liner (removable)

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Water Contact Indicator Tape 5557	
Property	Value
Color	White (top)/Red (bottom)
Top film	Polyester
Adhesive	Acrylic
Backing	Film/Paper Laminate
Thickness	10.2mils (0.259 mm)
Standard Roll Length	180 yards

Applications

- Use in water contact indicator in handheld or portable electronic devices.
- Smart phones, tablets laptop computers and keyboards.
- Wearable electronic devices
- Gaming and MP3 player
- Two-way radios
- Digital cameras
- Li-MH Batteries and chargers

3M™ Water Contact Indicator Tape 5557

- Ultra-thin caliper, 6.0 mils total, is suitable for application with tight design tolerances

Application Techniques

- Tape maybe die cut using rotary die cutting process
- Substrate should be smooth, clean, dry and oil-free to ensure good wet-out and adequate adhesion.
- Adhesive should not be applied at temperature lower than 10°C (50°F)
- Temperature resistance is -40 to 65°C for days /weeks or 121°C for minutes to hours.

Indicator Properties Typical Physical Properties and Performance Characteristics

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes. Final product specifications and testing methods will be outlined in the products Certificate of Analysis (COA) that is shipped with the commercialized product.

3M™ Water Contact Indicator Tape 5557		
Property	Method*	Value
**Adhesion to Stainless Steel: 90° Peel Adhesion, 5 mm/sec peel rate, 72-hr dwell time	ASTM D-3330	0.88 N/mm (82 oz/in)
**Adhesion to Polycarbonate: 90° Peel Adhesion, 5 mm/sec peel rate, 72-hr dwell time	ASTM D-3330	0.52 N/mm (47 oz/in)
Tape Thickness	ASTM D-3652	0.259 mm (10.2 mil)
Release liner Thickness	ASTM D-3652	0.051 mm (2.0mil)

*Methods listed as ASTM are tested in accordance with the ASTM method noted

** The adhesive data was generated using a 2-mil aluminum foil as a supplemental backing.

Indicator Properties

Note: the following technical information and data should be considered representative or typical only and should not be used for specifications purposes.



t = 0 sec.



t = 60 sec

1 drop of water place at edge of ½" diameter circle @ t = 0 sec

Storage and Shelf Life

The shelf life of 3M™ Water Contact Indicator Tape 5557 is 18 months from the date of manufacture when stored in the original packaging materials and stored at 21°C (70°F) and 50% relative humidity.

Certificate of Analysis (COA)

The 3M Certificate of Analysis (COA) for this product is established when the product is commercially available from 3M. The commercially available product will have a COA specification established. The COA contains the 3M specifications and test methods for the products performance limits that the product will be supplied against. The 3M product is supplied to 3M COA test specifications and the COA test methods. Contact your local 3M representative for this product's COA.

3M™ Water Contact Indicator Tape 5557

This technical data sheet may contain preliminary data and may not match the COA specification limits and/or test methods that may be used for COA purposes.

Final product specifications and testing methods will be outlined in the products Certificate of Analysis (COA) that is shipped with the commercialized product.

Safety Data Sheet: Consult Safety Data Sheet before use.

Regulatory: For regulatory information about this product, contact your 3M representative.

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer: Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OR TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.



Electronics Materials Solutions Division
3M Center, Building 224-3N-11
St. Paul, MN 55144-1000
1-800-251-8634 phone
651-778-4244 fax
www.3M.com/electronics

3M is a trademark of 3M Company.
Please recycle.
©3M 2019. All rights reserved.
70-0709-5279-4