

Technical Data | August 2019

## 3M<sup>™</sup> Water Contact Indicator Tape 5557NA

#### **Product Description**

3M<sup>™</sup> Water Contact Indicator Tape 5557NA is a 7.6 mil (193 micron) printable product. 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
- No adhesive
- UL-969 compliant

#### **Product Construction/Material Description**

PET Top Film – permanent Absorbent indicator layer

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

3M <sup>™</sup> Water Contact Indicator Tape 5557NA		
Property	Value	
Color	White (top)/Red (bottom)	
Top film	Polyester	
Adhesive	None	
Backing	Film/Paper Laminate	
Thickness	7.6 mil (193 micron)	
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
- 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

#### 3M™ Water Contact Indicator Tape 5557NA

- 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)
- Maximum roll width: 12 "
- Temperature resistance is -40 to 65°C for days /weeks or 121°C for minutes to hours.

#### **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 <sup>™</sup> Water Contact Indicator Tape 5557NA			
Property	Method	Value	
Tape Thickness	ASTM D-3652	0.259 mm (10.2 mil)	

#### **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 1/2" diameter circle @ t = 0 sec

#### **Storage and Shelf Life**

The shelf life of 3M<sup>™</sup> Water Contact Indicator Tape 5557NA is 3 years 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.

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