



# Technical Data Sheet

3M™ Industrial Protective Film 7070UV



[Product Details](#)

## Product Description

3M™ Industrial Protective Films 7070UV is an abrasion resistant, pressure sensitive adhesive backed film product designed to protect multiple industrial surfaces from damage caused by abrasion, scratching, erosion, UV and minor impacts. This rugged clear film is durable, flexible, and able to conform to curved surfaces while being easy to apply.

## Product Features

- Polyurethane backing resists punctures and tearing. 7071UV is suggested for more extreme applications.
- Provided on a paper liner for ease of die cutting specific shapes.
- Easily applied with simple tools in a minimal amount of time.
- Clear color will not obscure surfaces.
- Product may be used to protect surfaces outdoors with 7070UV effective for 1 year. Conclusions based on simulated extreme environmental exposure and individual applications will vary.
- Maximum service temperature 200°F (93.3°C)
- Demonstrated no wear through with minimal visible scuff pattern after Taber abrasion testing conducted using modified ASTM D-4060 1000g weight, 1000 cycles with S-37 mounting sheet.

## Technical Information Note

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

## Typical Physical Properties

Attribute Name	Test Method	Value
Adhesive Type		Acrylic
Adhesive Thickness		0.04 mm (1.5 mil)
Backing		Polyurethane
Backing Thickness	ASTM D3652	0.17 mm (6.5 mil)
Total Tape Thickness	ASTM D3652	0.2 mm (8 mil)
Liner		Paper
Water Vapor Transmission	ASTM D3833	6.1 g/100 in <sup>2</sup> /24 h

## Typical Performance Characteristics

Attribute Name	Test Method	Temperature	Value
180° Peel Adhesion	ASTM D3330	22 °C (72 °F)	5.1 N/cm (47 oz/in) <sup>1</sup>
Elongation at Break	ASTM D3759		638 %
Tensile Strength	ASTM D3759		119.1 N/cm (1088 oz/in)
Liner Release	ASTM D3330	22 °C (72 °F)	0.04 N/cm (0.39 oz/in)

<sup>1</sup> 12 in/min (300 mm/min)

## **Handling/Application Information**

### **Application Techniques**

- For best results, surfaces must be clean and free of dirt, debris and oils and films should be applied when surface temperature is between 50°F (10°C) and 80°F (27°C).
- Use of an application solution is suggested for easy positioning and squeegee application.
- For detailed application instructions and tips, see 3M Technical Bulletin on installation of Industrial Protective Films.

### **Industry Specifications**

[EN 45545 test report details \(ISO 5658-2, ISO 5660-1, ISO 5659-2\)](#)

### **Storage and Shelf Life**

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging, out of direct sunlight. For best performance, use this product within 24 months from date of manufacture.

### **Automotive Disclaimer**

#### **Select Automotive Applications:**

This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

## **Information**

**Technical Information:** The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

**Product Selection and Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

**Warranty, Limited Remedy, and Disclaimer:** Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 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, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 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. Warranty claims must be made within one (1) year from the date of 3M's shipment.

**Limitation of Liability:** Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

**Disclaimer:** 3M industrial and occupational products are intended, labeled, and packaged for sale to trained industrial and occupational customers for workplace use. Unless specifically stated otherwise on the applicable product packaging or literature, these products are not intended, labeled, or packaged for sale to or use by consumers (e.g., for home, personal, primary or secondary school, recreational/sporting, or other uses not described in the applicable product packaging or literature), and must be selected and used in compliance with applicable health and safety regulations and standards (e.g., U.S. OSHA, ANSI), as well as all product literature, user instructions, warnings, and limitations, and the user must take any action required under any recall, field action or other product use notice. Misuse of 3M industrial and occupational products may result in injury, sickness, or death. For help with product selection and use, consult your on-site safety professional, industrial hygienist, or other subject matter expert. For additional product information, visit [www.3M.com](http://www.3M.com).

## **ISO Statement**

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

3M™ Industrial Adhesives and Tapes Division  
3M Center, St. Paul, MN 55144-1000  
[3M.com/iatd](http://3M.com/iatd)

3M is a trademark of 3M Company.  
©3M 2024 (6/24)