



Technical Data Sheet

3M™ Industrial Protective Film 7070UV

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
Backing		Polyurethane
Backing Thickness	ASTM D3652	0.17 mm
Total Tape Thickness	ASTM D3652	0.2 mm
Liner		Paper
Water Vapor Transmission	ASTM D3833	6.1 g/100 in ² /24 h

Typical Performance Characteristics

Attribute Name	Test Method	Temperature	Value
180° Peel Adhesion	ASTM D3330	22 °C	5.1 N/cm ¹
Elongation at Break	ASTM D3759		638 %
Tensile Strength	ASTM D3759		119.1 N/cm
Liner Release	ASTM D3330	23 °C	0.04 N/cm

¹ 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

Precautionary Information: Refer to product label and Material Safety Data Sheet for health and safety information before using the product. For information, please contact your local 3M Office. You can click or scan QR code to see contact detail or visit www.3M.com Important Information: All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law. Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.

ISO Statement

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

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