



White Metallized Polypropylene Label Products

FP032302 • FP032302W • FP032305

Technical Data

May, 2010

Product Description

3M™ White Metallized Polypropylene Label Products FP032302, FP032302W and FP032305 are a white opaque material that offers excellent durability and opacity. These label products utilize 3M™ Adhesive P1655 OW, which is a high performance white permanent tackified acrylic adhesive designed for use in demanding environments, including automotive applications. This adhesive offers excellent opacity and adhesion to a wide variety of substrates.

Construction

Product Number	Facestock	Adhesive	Liner
3M label product FP032302	.0023 in. White Metallized Polypropylene TC2S	P1655 OW 1.1 mils	50# SC 3.1 mil semi-bleached super calendered kraft sheet
3M label product FP032302W	.0023 in. White Metallized Polypropylene TC2S	P1655 OW 1.1 mils	50# SC 3.1 mil semi-bleached super calendered kraft sheet
3M label product FP032305	.0023 in. White Metallized Polypropylene TC2S	P1655 OW 1.1 mils	90# Polycyd. 7.0 mil bleached kraft sheet polyethylene coated on two sides

(Calipers are nominal values)

Features

- Meets CONEG requirements.
- Adhesive dry ingredients are listed by FDA as indirect food contact additives when used in food packaging with minimum opportunity for exposure. See 21 CFR 175.105.
- Liner for 3M label product FP032302 and FP032302W is designed for high-speed die cutting and matrix stripping. Not recommended for sheet on press applications.
- Liner for 3M label product FP032305 is designed for the ultimate in layflat. The backside of this liner is not printable.

Application Ideas

- Cover-up labels, any application requiring extra opacity.
- Automotive underhood.
- Harsh environments.
- Durable goods.

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Typical Physical Properties

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

Adhesion properties determined per TLMI Method using 1.0 mil polyester with 1.1 mil of adhesive on a polished stainless steel panel.

Peel Adhesion	4.5 lbs./in. (785 N/m)	TLMI Method, 180° Peel, 12"/min., 1" wide sample
Loop Tack	2.5 lbs./in. (435 N/m)	TLMI Method, 12"/min., 1" wide sample
Shear	2 hours	TLMI Method, 1 in ² x 1000g
Adhesive Coat Weight	1.95 to 2.25 g/100 in ²	TM-2279
Release Range	15 to 50 g/2 in.	TLMI Method, 180° removal, 300 in./min.
Service Temperature	-40°F to 140°F (-40°C to 60°C)	
Application Temperature	40°F to 120°F (5°C to 49°C)	
Convertability	In order to maximize the benefits of 3M™ High Opacity White Acrylic Adhesive P1655, thicker calipers are utilized for a variety of surfaces. Its higher caliper, while desirable for the end use applications, may require extra care during processing. Please refer to the die cutting/converting section of this data page or the "Guide to Converting and Handling Label Products" technical bulletin for additional information.	

Application Techniques

Recommended substrates:

- Painted metal (except powder coats)
- Low surface energy plastics
- Stainless steel
- Cast aluminum
- Glass filled polypropylene
- Talc filled polypropylene

For maximum bond strength, surface should be clean and dry. A typical cleaning solvent is heptane or isopropyl alcohol. **Note:** Consult the manufacturer's MSDS for proper handling and storage of solvents. For best conditions, application surface should be at room temperature or higher. Low temperature surfaces (below 10°F [-12°C]) can cause the adhesive to become so firm that it will not develop maximum contact with the substrate. Higher initial bonds are achieved through increased rub down pressure.

Printing

- 3M™ White Metallized Polypropylene Label Products FP032302, FP032302W and FP032305 are topcoated to accept most film ink systems.

Please be aware that our current production specifications for these materials are primarily qualified for printers who use flexographic, screen printing, and thermal transfer printing processes. 3M has neither done profile work with these products for printing by digital inkjet processes, nor engaged in any lot variation studies, nor taken any special measures in manufacturing or handling of these products with the intent of recommending these products for printing by digital inkjet methods.

Die Cutting / Converting

Die cut with steel rule or flatbed dies. The liner also allows kiss cutting and back splitting. The converter can cut through the polyester facestock without cutting through the liner. Sheet label materials are not recommended for rotary die cutting and stripping operations.

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Packaging	Finished labels should be stored in plastic bags.
Storage	Store at room temperature conditions of 72°F (22°C) and 50% relative humidity.
Shelf Life	If stored under proper conditions, product retains its performance and properties for two years from date of manufacture.
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 knowledge and 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.
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This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2000 standards.



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