

# PolyPro 4000D Label

# Direct thermal matte polypropylene label with an all-temp acrylic adhesive

Optimal for applications where added durability over paper is needed due to moisture exposure or clean removability is required, Zebra's PolyPro 4000D label delivers. This direct thermal white polypropylene label is engineered to provide high print quality and durability at an economical price. Its all-temperature permanent acrylic adhesive can be applied to surfaces as cold as -40°F/-40° C and meets FDA 175.105 for indirect food contact requirements. It is suitable for fan-folding. And with Zebra's legacy of craftsmanship and durability, you can count on optimized performance – with each and every label. PolyPro 4000D labels are recommended for a wide variety of labeling applications, including cold storage, package labeling and indirect food labeling.



#### Print Confident. Print Quality. Print Zebra.

Printing supplies can impact everything from printhead lifespan to operational efficiency. That's why we design, produce and rigorously pre-test our own line of thermal printing supplies to ensure consistent, optimized performance. We utilize an ISO 9001 certified, 23-point inspection process and consistent materials to ensure reliable performance from order-to-order. No matter when you order your labels, you can count on the same consistent performance.

#### Moisture and tear resistant

The polypropylene facesheet will not break down when subjected to moisture. In addition, the material is tear-resistant, which is beneficial for applications requiring the removal of the entire label for replacement with a new label, such as with reusable totes, crates, shelving and more.

# Optimized for use with food products and in cold environments

With its all-temperature permanent acrylic adhesive, these labels can be securely applied in temperatures as low as -40°F/-40° C and will remain adhered in temperatures of -65°F to 131°F/-54°C to 55°C, making them perfect for use on assets in cold environments. The adhesive meets FDA 175.105 for indirect food contact and can be applied to shrink wrap and other food packaging.

#### **Customized for your application**

Zebra can deliver PolyPro 4000D labels in just about any size, shape or label set configuration to meet the requirements of your application and process. In addition, our flexographic print presses can add pre-printed text, graphics and color.

# **Specifications**

#### **Material Construction**

Raw Material Number	65843RM
Facestock	Direct thermal matte white polypropylene 2.8 mil/71.1 microns
Adhesive	All-temp permanent acrylic adhesive 0.8 mil/20.32 microns
Liner	40 lb/50 gsm semi-bleached kraft liner 2.5 mil/63.5 microns
Total Thickness (+/-10%)	6.1 mil/154.9 microns
Environment	Indoor use

#### Temperature Performance

Minimum Application Temperature <sup>1</sup>	-40° F/-40° C
Service Temperature Range <sup>2</sup>	-65° F to 131° F/-54° C to 55° C

#### **Recommended Printers and Ribbons**

Printers	Direct thermal printer; use Zebra desktop, industrial and mobile thermal printers foroptimal performance
Ribbons	N/A

#### Adhesive Strength

Corrugate	5 minute dwell time: 17 oz/in.
	24 hour dwell time: 18 oz/in.
Steel	5 minute dwell time: 49 oz/in.
	24 hour dwell time <sup>3</sup>
Polycarbonate	5 minute dwell time: 57 oz/in.
	24 hour dwell time <sup>3</sup>
Polyethylene	5 minute dwell time: 26 oz/in.
	24 hour dwell time: 46 oz/in.

## Chemical Resistance

Weak Chemicals	
Blood	Test in your application
Body Fluid	Test in your application
Salt Water	Test in your application
Water	Test in your application
Window Cleaner	Test in your application
Moderate Chemicals	

# Regulatory and Compliance

FDA 175.105 for direct contact with dry foodstuffs, or alternatively separated by a functional barrier

## **Product Performance and Suitability**

Recommended storage conditions	6 months duration when stored at 72° F/22° C at 50% RH
Expected life span in application <sup>4</sup>	Indoor up to 1 year

### Material Testing in End Application

The information contained in this document is to be used for guidance only and is not intended for use in setting specifications. All purchasers of Zebra products shall be solely responsible for independently determining if the product conforms to all requirements of their unique application.

#### Warranty

Supplies are warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For the complete warranty statement, please visit www.zebra.com/warranty

#### **Footnotes**

- 1. When the label is applied, the environment and surface should
- be above this temperature.

  2. Following correct application and appropriate dwell time (usually 24hrs) the media will withstand this temperature range. 3. Attraction between adhesive and surface is so great that the
- $\dot{a}$ . Following correct application and appropriate dwell time (usually 24hrs) we expect, but do not warrant, a life span as indicated

#### **Markets and Applications**

#### Warehousing

 Cold-storage labeling Package labeling

#### Other

· Indirect food labeling

### **Chemical Resistance**

Alcohol	Not recommended
Ammonia	Not recommended
Bleach	Not recommended
IPA	Not recommended
Harsh Chemicals	
Gasoline	Not recommended
Grease	Not recommended
Oil	Not recommended
Extreme Chemicals	
Acetone	Not recommended
Acetone  IR Reflow	Not recommended  Not recommended
IR Reflow	Not recommended
IR Reflow	Not recommended  Not recommended

