

# Z-Essentials 500D

## Direct thermal paper label with a permanent acrylic adhesive

Z-Essentials paper barcode labels are designed for mass-market applications and offer exceptional value. Purposefully designed for a wide range of high-volume short-term applications, they are the smarter supply choice. Z-Essentials 500D is a direct thermal paper label with permanent acrylic adhesive. It features an uncoated facestock, which makes it a cost-effective choice for businesses. This cost-effective option is particularly suitable for applications that have a short shelf life or those used within controlled environments. This label is ideal for shipping, product identification, work-in-process labeling, and other short-life high-volume applications. The Z-Essentials 500D is compliant with the FDA 175.105 code for indirect food contact, making it a suitable choice for application to shrink wrap and other food packaging.



### **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.

### **Features**

Zebra Z-Essentials 500D delivers high-resolution prints with sharp text, graphics, and barcodes, ensuring optimal scanning accuracy. Compatible with a wide range of Zebra direct thermal printers, these labels are easy to use. Z-Essentials labels offer cost-effective labeling solutions without compromising on performance or quality, making them a preferred choice for businesses seeking reliable labeling solutions.

### **Customization Available**

Zebra can deliver Z-Essentials 500D 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.

**Z-Essentials 500D — uncoated paper with permanent acrylic adhesive.**

For more information, please visit [www.zebra.com/supplies](http://www.zebra.com/supplies)

# Specifications

## Markets and Applications

### Material Construction

RM Number	10040738RM
Facestock	White Direct Thermal Uncoated Paper; 3.0 mils
Adhesive	Permanent Acrylic Adhesive; 0.7 mils
Liner	40 lb. semi-bleached kraft stock; 2.3 mils
Total thickness +/- 10%	6.0 mil ± 10
Environment	Indoor use; cold temperature compatible

### Temperature Performance

Minimum Application Temperature <sup>1</sup>	40°F/4°C
Service Temperature Range <sup>2</sup>	-40°F to 140°F/-40°C to 60°C

### Recommended Printers and Settings

Printers	Direct thermal printers; use Zebra industrial, desktop or mobile printers for optimal performance
Ribbons	N/A

### Adhesive Strength

Corrugate	5 min: 9.5 oz./in.; 24 hr: 5.9 oz./in.
Steel	5 min: 60.6 oz./in.; 24 hr: 64.9 oz./in.
Polycarbonate	5 min: 48 oz./in.; 24 hr: 63.8 oz./in.
Polyethylene	5 min: 12.6 oz./in.; 24 hr: 13.2 oz./in.

### Chemical Resistance

Weak Chemicals	
Blood	Not Recommended
Body Fluid	Not Recommended
Salt Water	Not Recommended
Water	Not Recommended
Window Cleaner	Not Recommended
Moderate Chemicals	
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
IR Reflow	Not Recommended
MEK	Not Recommended
TCE	Not Recommended
Xylene	Not Recommended

### Regulatory and Compliance

EC 1935/2004, EU 10/2011 and BfR Recommendation XIV for direct contact with dry and moist, non-fatty foodstuffs  
FDA 175.105 for indirect contact with dry foodstuffs, or alternatively separated by a functional barrier  
BPA and latex free

### Product Performance and Suitability

Recommended storage conditions	72° F/22° C at 50% RH
Expected life span in application <sup>3</sup>	Indoor use, for 1 year +
Sample Part Number	SAM10040738

#### Logistics

- Shipping
- Cross docking

#### Retail

- Shipping

#### Warehousing

- Shipping
- Picking
- Receiving

#### Manufacturing

- Shipping
- Work-in-process
- Product Identification

#### Other

- eCommerce shipping labels

## 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 24 hrs) the media will withstand this temperature range.
3. Following correct application and appropriate dwell time (usually 24 hrs) we expect, but do not warrant, a life span as indicated.

\* Specifications are subject to change without notice.