

# 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

## 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              |

## Markets and Applications

### 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.