

# **Z-Perform™ 1000D PF Deep-Freeze**

## Direct thermal, phenol-free, paper label with cold temperature adhesive

Many thermal materials utilize phenol developers, such as BPS or BPA, which studies have shown can negatively impact users' health. Zebra's Z-Perform 1000D PF label, however, offers you a unique alternative. This direct thermal paper label is engineered with an alternative developer, offering an ideal substitute to phenols, while delivering the performance you have come to rely on from Zebra's Z-Perform family. The removable, cold temperature adhesive will work in temperatures as cold as -40°F/-40°C. And with Zebra's legacy of craftsmanship and durability, you can count on optimized performance — with each and every label. Z-Perform 1000D PF labels are recommended for a wide variety of labelling applications including cold storage and cold transport.



# Count on Consistently Exceptional Performance with Zebra Certified Supplies

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 quality inspection to ensure consistent quality — and we never swap out materials. No matter when you order your labels, you can count on the same great performance.

#### Phenol-Free

Many thermal supplies use phenols as developers. Phenols are considered by some to be dangerous chemicals that have the potential to lead to adverse health conditions. Zebra's Z-Perform 1000D PF material offers a phenol-free labelling solution while delivering the performance you have come to expect from Zebra Certified Supplies.

#### **Ensure Reliable Adhesion, Even in Cold Environments**

With its removable cold temperature acrylic adhesive that offers excellent adhesion, even in temperatures as cold as -40°F/-40°C, Z-Perform 1000D PF Deep-Freeze labels are ideal for a wide variety of cold indoor applications such as cold storage and deep-freeze product labelling.

# **Specifications**

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Material Construction	
Facestock	Uncoated, direct thermal paper
Adhesive	Permanent acrylic adhesive 18 microns
Liner	71gsm glassine liner 49 microns
Total Thickness (+/- 10%)	146 microns
Environment	Indoor use, cold and deep freeze environments
Temperature Perfor	mance
Minimum Application Temperature <sup>1</sup>	5°F/ -15°C
Service Temperature Range <sup>2</sup>	-58°F to 122°F/-50°C to 50°C
Recommended Printers and Ribbons	
Printers	Direct thermal printer (no ribbon required); use Zebra mobile, desktop, mid-range and high-performance thermal printers for optimal performance
Ribbons	N/A
Chemical Resistance	re
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	Not Recommended
Moderate Chemicals	
Alcohol	Not Recommended
Ammonia	Not Recommended
Bleach	Not Recommended
IPA	Not Recommended
Harsh Chemicals	
Gasoline	Not Recommended
Grease	Not Recommended
Extreme Chemicals	
Acetone	Not Recommended
IR Reflow	Not Recommended
MEK	Not Recommended
TCE	Not Recommended
Xylene	Not Recommended

#### Regulatory and Compliance

Complies with European food regulation EC 1935/2004, EU 10/2011, BfR Recommendation XIV and ISEGA approved for direct contact with dry and moist and such kind of fatty foods that have a reduction factor of at least 3 according to EC directive 85/572/EEC Phenol free and latex free

#### **Additional Information**

Recommended Storage Conditions	1 year duration when stored at 68°F to 77°F/20°C to 25°C at 40 to 50% RH
Expected Life Span in Application	Indoor use, for 1 year
Sample Part Number	SAMPLE30780

### **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.

#### **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.

### Markets and Applications

### Transportation & Logistics

• Cold transport

#### Manufacturing

Deep freeze
product labelling

#### Healthcare

Sample labelling

#### Warehouse

- Shipping, picking and receiving in cold areas
- · Cold storage

