



## Z-Supreme 4000T Yellow

# Permanent labels

## Thermal Transfer

### Description

An amber polyimide film designed for thermal transfer printing with Zebra printers. Z-Supreme 4000T Yellow media is coated with a high performance, high temperature permanent acrylic adhesive. Together with 5095 and 5100 resin ribbons, this Zebra labelling solution is designed for extremely high temperature and harsh environmental applications.

### Suggested Applications

- Printed circuit board applications (top-side and bottom-side labelling)
- High temperature, harsh environments requiring excellent print quality, durability and label performance
- High-temperature product and asset labelling

### Technical Specifications

	Description	Caliper
Facestock	Amber polyimide film	51 microns
Adhesive	Permanent, acrylic based high-temperature adhesive	36 microns
Liner	65 gsm white glassine liner	59 microns
		Total 146 microns

**Recommended Zebra printers:** high-performance thermal transfer printers  
(testing is strongly recommended on mid-range printers)

**Recommended Zebra ribbons:** 5095, 5100

**Minimum application temperature:** 10°C

**Service temperature range:** -40°C to 575°C (short term)

**Recommended storage conditions:** One year duration when stored at 21°C  
50% RH



## Z-Supreme 4000T Yellow continued

### Performance Characteristics

<b>Scannability:</b>	Excellent ANSI bar code print quality
<b>Print Quality:</b>	Excellent human readable print quality
<b>Print Durability:</b>	Excellent Crockmeter durability 500 rubs - no print degradation
<b>Maximum Recommended Print Speed:</b>	50.8mm/sec
<b>High Temperature Testing:</b>	Bar code printed labels applied to aluminium panels tested in muffle furnace. Five minute adhesive dwell time before heat exposure. ANSI grade B before and after exposure, no visible degradation of printed bar code or facestock.

### Maximum Heat Resistance:

Temperature	Time
575°C (1067°F)	30 seconds
500°C (932°F)	60 seconds
375°C (707°F)	5 minutes
325°C (617°F)	30 minutes
275°C (527°F)	60 minutes

### Solvent Resistance Testing: Z-Supreme 4000T Yellow™ media with Zebra 5100 ribbon

<b>Solvents Tested:</b>	IPA (Isopropyl Alcohol) Oil (10W-40) Toluene Water	Heptane Unleaded Gas Windex MEK (Methyl Ethyl Ketone)
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<b>Test Method:</b>	Apply printed samples to stainless steel panels. Put panels through following cycles: 10 minutes immersed 30 minutes out Rubbed with standard cloth when wet after immersion Rubbed with standard cloth when dry after immersion
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## Z-Supreme 4000T Yellow continued

### Thermal Transfer Material Test Results

Solvent	Wet	Dry
<b>IPA</b>	No effect	No effect
<b>Oil</b>	No effect	No effect
<b>Toluene</b>	Ribbon and coating rub off after one cycle	No effect
<b>Water</b>	No effect	No effect
<b>Heptane</b>	Some rub off after three cycles	No effect
<b>Unleaded Gas</b>	Ribbon rub off after three cycles	Coating appears slightly degraded; bar codes show no substantial effect
<b>Windex</b>	Some ribbon/coating rub off after two cycles	No effect
<b>MEK</b>	Ribbon and coating rub off after one cycle	No effect

### Product Performance and Suitability

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.

For testing of this material, please order SAM65265.