ThermalMark - Thermal Transfer Printable Labels

Metalcraft's ThermalMark polyester labels offer the best of both worlds, the durability of a pre-printed label with the flexibility to custom print information on-site as needed.

ThermalMark labels are sub-surface printed providing a durable layer of protection to the information pre-printed on the label. This unique process eliminates the need for a laminate; thereby eliminating additional cost as well as the possibility of delamination. The digital printing process used to produce these labels also ensures even the most detailed logo and text will look crisp and clean.

The thermal transfer receptive topcoat of the ThermalMark allows for labels to be easily customized with different text, barcodes, or serial numbers printed locally through a thermal transfer printer. This allows for easy on-demand printing of specific labels and gives flexibility for application specific printing demands.

The high grade .002 mil. polyester construction is pliable enough to conform to curved surfaces and tough enough to resist caustics, solvents and mild abrasion.

Key Product Features

- ThermalMark's thin, durable construction materials make it ideal for easy usage in most desktop thermal transfer printers
- Sub-surface printing protects against extreme solvents, caustics, acids and mild abrasion while eliminating need for a laminate
- Thermal transfer receptive topcoat allows for easy on-site label customization and printing
- Digital printing process ensures readability as well as crisp, clean company logos
- Durable .002" polyester material easily conforms to uneven or radius surfaces
- .001" thick adhesive provides excellent adhesion to low and high surface energy materials

Not sure what product you need?

Call Our Trained Experts!

641-423-9460

Toll Free: 800-437-5283

METAL CRAFT

ID MADE BETTER

3360 9th St. SW
Mason City, IA 50401
www.idplate.com
E-mail: metalcraft@idplate.com

ThermalMark Label Specifications

Material: ThermalMark labels are a multi-layer construction comprised of two primary materials.

.002" mil clear polyester top layer with thermal transfer topcoat

.002" thick white polyester base layer which can withstand moderate to harsh exposure, mild to moderate abrasion and temperatures up to 250°F for short durations.

Label Copy: The label copy may include block type, stylized type, logos or other designs. All copy, block type, stylized type, logos, designs, and bar code are subsurface printed. This unique process provides excellent resistance to solvents, caustics, acids, and moderate abrasion.

Colors: Standard colors include black, red, yellow, green or blue. Custom spot colors also available at no additional charge.

Standard Adhesive: .001" MC78 adhesive. This adhesive has excellent durability, particularly suited for a wide range of polyolefin and other low-surface energy materials.

Standard Sizes:
No. 019: 2" x 1"
No. 123: 1 3/4" x 1/2"
No. 277: 2" x 3/4"
No. 463: 3" x 2"
No. 694: 2 3/4" x 1 1/4"
No. 1706: 2.9" x 9/10"
No. 1983: 3" x 2 1/4"

Printing Recommendations:

- Use full resin ribbons for better print quality and performance
- Use higher heat settings for desktop/kiosk printers for best print quality

Packaging: Shipped on convenient 1" and 3" core rolls. Cleaning solution is provided to assist in applying to a clean surface. Cartons are clearly marked

Shipment: 6 work days upon receipt of order and proof approval.

To Order: Call 1-800-437-5283 and ask for customer service.

Test Results

These tests were conducted for a limited period of time in strict laboratory conditions. In order to achieve maximum satisfaction we highly recommend that any customer considering use of this product test the labels in the environment in which they will be used.

Chemical Immersion Test: Labels were applied to a clean glass substrate and submerged in the following chemicals for 2, 24 and 48 hours. Focus was on the thermal transfer printed image as well as the condition of the label construction. Results were identical for both 170Xilll+ and Gx430t printers using full resin ribbons.

Chemical Resistance Test

	Water	Glass Cleaner	Bathroom Cleaner	Isopropyl Alcohol	Acetone	NaOH pH 12	HNO3 pH 12	HCl pH 12	Brake Fluid	Diesel Fuel
Thermal Transfer Rub Test	NE	WO48	NE	WO2	WO2	NE	NE	NE	WO2	NE
Label Construction	NE	AL48	NE	AL24, TD48	AL24, TD48	NE	NE	NE	NE	AO2

Key: NE=No Effect, WO2=Barcode Wiped Off after 2 hrs., WO48= Barcode Wiped Off after 48 hrs., AL24= Adhesion loss after 24 hrs., AL48= Adhesion loss after 24 hrs., AO2= Adhesive Ooze after 2 hrs., TD48= Tag Delamination after 48 hrs.

Temperature Heat Test

Heat Test: Labels were applied to .020" aluminum panels and heated to the temperatures listed below for 15 minutes.

Printer	200° F	300° F	400° F	500° F
ThermalMark - 170Xilll+	NE	NE	NE	LC, FD
ThermalMark - Gx430t	NE	NE	NE	LC

Key: NE=No Effect, LC=Label Cracked/Blistered, FD=Label Face Discolored

Abrasion Resistance Test Using Modified ASTM F1478

Results below show before and after abrasion on the thermal transferred printed image using full resin ribbons. Samples with TT printed black bars subject to 20 revolutions with CS-10 wheels 500g per wheel on Taber 5130.

K Density Before	K Density Before	% Change
1.79	1.54	13.97