



PERFORMANCE GUIDE

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Approved by J. S.

**PRODUCT: THERMACOLOR®
TL4000 3-mil Satin**

PRODUCT DESCRIPTION

Thermacolor products are high quality, low temperature, heat activated films designed for the overlamination and encapsulation of graphic images. Thermacolor protects the image from harmful ultra-violet (UV) light, moisture, dirt, oils and other potential contaminants. The use of Thermacolor on one or two sides lends body to the image for easier handling and display.

TL4000 Series is a family of clear, satin PET films with a heat activated, polymeric adhesive on one side. The use of *TL4000* lends depth and vibrancy to underlying images. Stiffness of the laminated image will vary with the Thermacolor thickness selected as well as whether or not it is used on both sides.

PRODUCT INFORMATION

Product Thickness:	3 mil
Surface Appearance:	Satin
pH:	7.0
Heat Seal Initiation Temperature	180° (82°C)
Roll Wind:	Adhesive In
Core Size:	3" I.D.
Recommended Storage:	Rolls should be stored on end or suspended.

PROCESSING TIPS

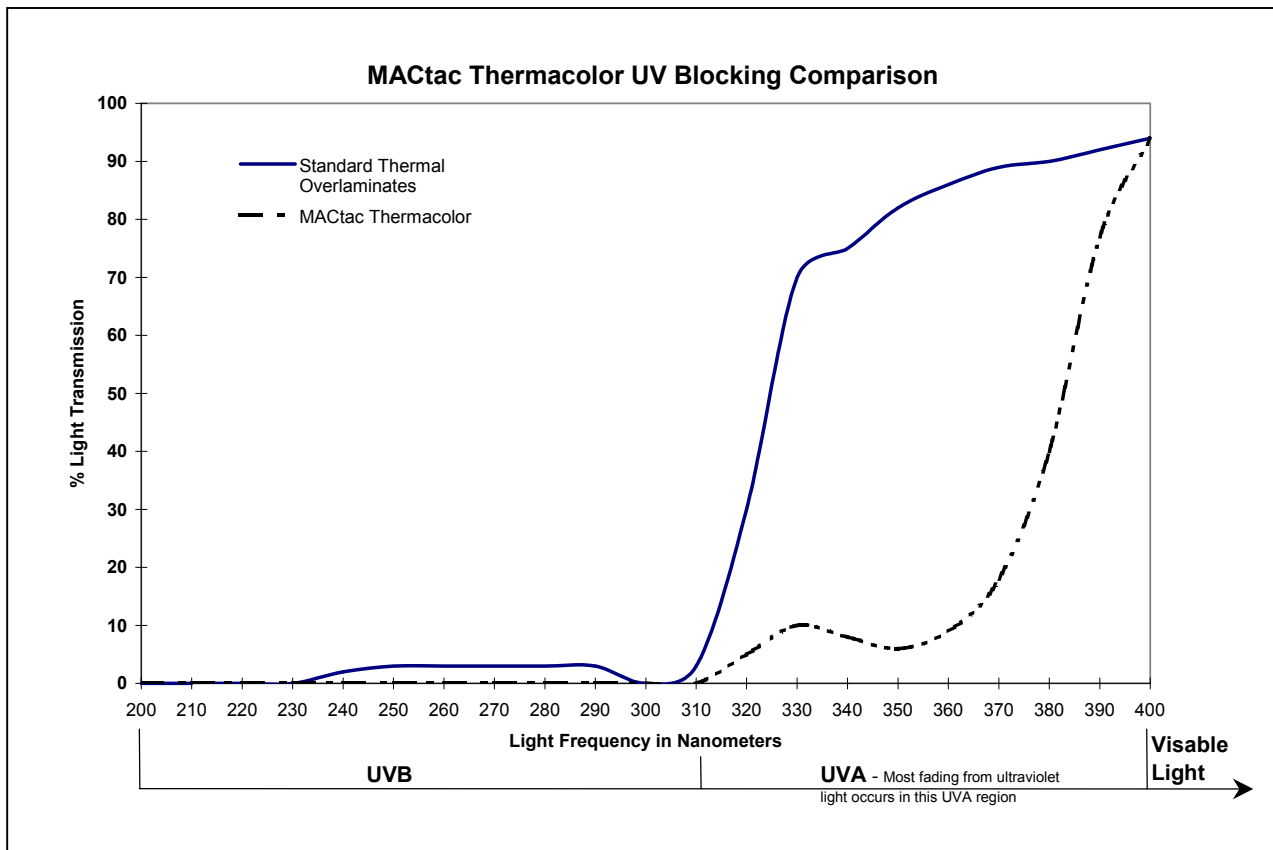
The suggested laminating temperature is approximately 190°F (88°C) for 3-mil, 200°F (94°C) for 5-mil and 210°F (99°C) for 10-mil Thermacolor at a throughput speed of 3 - 5 ft./minute. The temperature and/or speed may need to be adjusted depending on the specific laminating equipment, thickness of the Thermacolor, and desired throughput speed.

To increase production speed, a temperature increase of 10 - 20°F (5 - 10°C) may permit operating at 10 ft./minute.

A high temperature along with a slow running speed could cause blistering or waviness in the final laminate. To correct this problem, try reducing the temperature or increasing the speed.

A low temperature and a high running speed could result in incomplete bonding, poor adhesive wet-out (sometimes referred to as "silvering"). To correct this problem, be sure adequate laminating pressure is being used, raise the temperature slightly, or slow the running speed.

Note: Users should determine their own specific lamination conditions in order to optimize performance and operating efficiency on their equipment.



SHELF LIFE

Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: MACTac recommends that rolls be stored on end or suspended from the core.

** Values given are typical and are not necessarily for use in specification.*

CALL 1-800-401-5005 for additional product information

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