

www.MACtac.com

SHELF LIFE & STORAGE OF MACTAC DIRECT THERMAL PRODUCTS

Optimal Storage Conditions

Before imaging, the shelf life of Mactac adhesive laminated direct thermal products is approximately one year from the date of shipment when stored under the following conditions:

- Temperature 72°F
- Relative humidity 50%
- Stored in a dark environment, avoiding natural or artificial light
- In sealed packaging and avoiding contact with conditions & chemicals such as UV Light, heat & humidity, plasticizers, oils, solvents and water.

These are the conditions under which the full 1 year shelf life can be achieved.

Higher humidity and higher temperatures can affect shelf life. Specific time frames based on incremental changes in temperature and humidity are impossible to compute.

Environmental Conditions Impacting Direct Thermal

It is most important to understand a few key points related to direct thermal products.

- High temperature will accelerate the aging process, which will involve some degradation of thermal imaging characteristics and discoloration.
- Very high temperatures close to 150°F may begin to pre-activate the thermal coating, causing a light gray appearance. As temperatures increase to about 170°F, the image will become dark black (heat resistant grades are available to prevent pre-activation up to about 190°F).

- Humidity increases the aging affect of heat, with high humidity and high heat being the most undesirable combination. Low humidity is generally not a problem with respect to imaging characteristics or appearance of the paper surface or coating. However, paper is reactive to changes in temperature and low humidity and may cause the stock to tend to curl when giving off some amount of its inherent moisture content into a low humidity surrounding (inversely; stock may take on additional moisture in high humidity).
- Prolonged exposure to open air environments with airborne contaminants can cause oxidation which may tend to discolor the stock through low grade activation, typically occurring in conjunction with light and/or heat.
- Although virtually any direct light will have an affect on direct thermal stocks, the ultraviolet component of direct sunlight will have a more pronounced yellowing effect on direct thermal products than indoor fluorescent lighting. However prolonged exposure to indoor fluorescent lighting and/or incandescent lighting can also influence background discoloration.

CALL **1-800-548-3456** for additional product information

IMPORTANT NOTICE: The information given and the recommendations made herein are based on our research and are believed to be accurate, but no guarantee of their accuracy or completeness is made. In every case, user shall determine before using any product in full scale production, or in any way, whether such product is suitable for user's intended use for their particular purpose under their own operating conditions. User assumes all risk and liability whatsoever in connection with their use of any product. The products discussed herein are sold without any warranty as to merchantability or fitness for a particular purpose, or any other warranty, express or implied. No representative of ours has any authority to waive or change the foregoing provisions, and no statement or recommendation not contained herein shall have any force of effect unless in an agreement signed by the officers of seller and manufacturer. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent without authority from the owner of the patent. The following is made in lieu of all warranties, express or implied: Seller's and manufacturer's only obligation shall be to replace or credit such quantity of the product proved to be defective at its discretion.

TM Trademark of Morgan Adhesives Company.

® Registered Trademark of Morgan Adhesives Company.

