



# THERMAPRINT™ 400

FOR DIRECT THERMAL AND  
THERMAL TRANSFER PAPER COATINGS

Imerys Kaolin  
Natural Mineral Solutions



**IMERYS**  
Kaolin

**THERMA-PRINT™ 400** is a high brightness, calcined kaolin for thermal paper coatings. It is made via a precisely controlled thermal process using a select kaolin feed. The resulting product has a controlled pore structure that maximizes the microporosity. **THERMA-PRINT™ 400** is designed to provide the right coating and surface structure for thermal transfer and direct thermal coated printing papers. **THERMA-PRINT™ 400** improves coverage, ink absorbency and print properties.

### CALCINED CLAY FOR THERMAL PAPER COATINGS

Calcining kaolin at elevated temperatures breaks down its original crystal structure and decomposes organic and other impurities mixed with the kaolin. Calcined clay has a uniform, fine particle size and exhibits excellent dispersability. Calcined clay also provides substantial heat insulating properties (low thermal conductivity) in a paper coating.

**THERMA-PRINT™ 400** helps thermal printing by providing the appropriate coating and surface structure for direct thermal and thermal transfer coated printing papers.

- Improves coverage, ink absorbency and print properties of the coating layer.
- For thermal transfer printing, the product provides a smooth coating layer and an open, micro porous surface so that the melted wax component of thermal transfer inks fix sufficiently on the coated paper.

The low thermal conductivity of **THERMA-PRINT™ 400** and overall pigment packing structure provides improved thermal print quality:

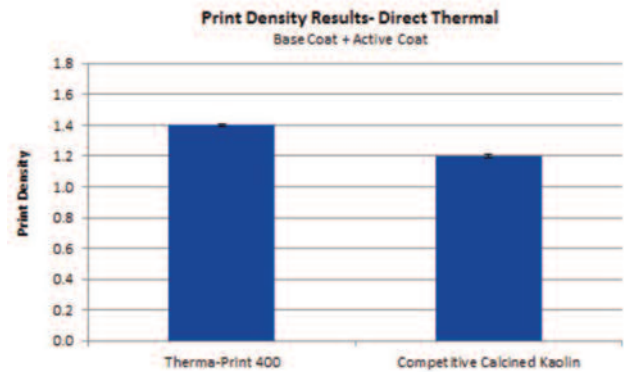
- For direct thermal, heat is contained in the dye layer and does not spread, which means a more efficient dye activation and an improved print quality and optical density.
- For thermal transfer, this allows efficient melting of the wax-based inks, and avoids thermal curling.

**THERMA-PRINT™ 400** showed significant improvement in the print density and overall print quality compared to a competitive product.



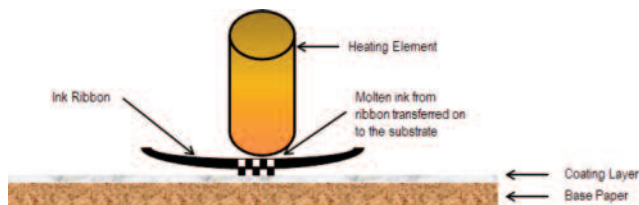
THERMA-PRINT™ 400

Competitive Calcined Kaolin

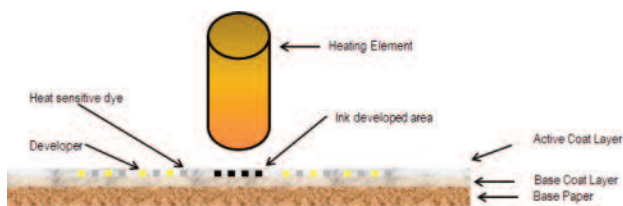


Print Density comparison Graph

For further information please contact one of our Sales Representatives who will be able to assist you.



Thermal Transfer: Image is created by melting solid ink coated on film ribbon.



Direct Thermal: Color development takes place in the image area, when the heat sensitive dye present in the active layer of the substrate comes in contact with the heating element.

### Imerys Kaolin

100 Mansell Court East - Suite 300 - Roswell - Georgia - USA | Tel: +1 770 645 3300 | [www.imerys-kaolin.com](http://www.imerys-kaolin.com)

Although the information in this document is believed to be accurate, it is presented without warranty of any kind and Imerys assumes no liability with respect to its use. No license to any intellectual property right is granted or implied. Statements or suggestions concerning possible use are made without representation or warranty that any such use is free of patent infringement, and are not to be construed as suggestions or inducements to infringe any patent.

