

# UV Thermoforming Ink

## Series 150/2

### Properties

Viscosity	25 °C	24 – 28 mPas
	50 °C	8 – 11 mPas
Surface tension	25 °C	20 – 22 dyn/cm
UV dose for hardening with an Hg lamp (type H)		500 mJ/cm <sup>2</sup>

### Colors

- Series 150/21100 white
- Series 150/21200 yellow
- Series 150/21300 magenta
- Series 150/21400 cyan
- Series 150/21800 black

### Shelf life

- 9 months when stored between 15 and 35 °C

### Package sizes

- 1 l PE bottles (black)
- 5 l PE cubitainer (black)
- Other package sizes are available on request.

### Recommended cleaning and flushing fluid

TIGER Flush 151/00001

### Applications

TIGER thermoforming inks are acrylate-based UV curing systems that can be used on flexible and rigid substrates. These inks were developed for use in DOD piezo printing heads.

The inks provide very good adhesion to a wide range of different plastic substrates such as plexiglass (PMMA), ABS, polyester, polycarbonate, vinyl, PVC, etc. To achieve good adhesion to polyolefins such as polyethylene or polypropylene, it must be subjected to a suitable pre-treatment (corona or flame treatment, etc.).

The inks have a very high ductility above the softening point. In thermoforming processes, elasticities of up to 700% can be achieved. The light fastness rating for all of the pigments used is 7 or better on the blue wool scale, making the pigments suitable for use on outdoor surfaces for 1 – 2 years.

### Printing conditions

The inks can be processed at temperatures up to 55 °C. The UV dose required depends on the thickness of the printed layer, with the previously specified 500 mJ/cm<sup>2</sup> corresponding to the typical radiation dose of a non-doped mercury vapor lamp of type H with a layer thickness of 10 – 15 µm. Better hardening results can be achieved in special cases with doped UV sources (iron or gallium) since the UV radiation emitted covers a larger wavelength range.

## Compatibility of materials

### Compatible materials:

- PP
- PE (HD + LD)
- Stainless steel
- PTFE
- EPDM rubber

### Incompatible materials:

- PVC
- Butyl rubber
- Brass
- Viton®
- Nitrile plastics
- Polyurethane rubber
- Neoprene

## Disclaimer

Our verbal and written recommendations for the use of our products are based upon experience to the best of our knowledge in accordance with present technological standards. These are given in order to support the buyer or user. They are non-binding and do not constitute any contractual legal relationship or additional obligation from the purchase agreement. They do not release the purchaser from verifying the suitability of our products for the intended application at his own responsibility. We warrant that our products are free of flaws and defects to the extent as stipulated in our Terms of Delivery and Payment.

As part of our duty to inform, we modify our product information periodically according to technical progress. Therefore, please visit the download area of [www.tiger-coatings.com](http://www.tiger-coatings.com) to make sure you have the most current version of this Product Data Sheet. TIGER Coatings GmbH & Co. KG reserves the right to make changes to the Product Data Sheet without written notification.

**This Product Data Sheet substitutes any and all previous Product Data Sheets and notes for customers published on this subject matter and is only intended to give a general product overview. Please request specific information for products outside of our standard product list (latest version).**

**Our technical notes and the general Terms of Delivery and Payment, the most recent version of which you can call up at any time at [www.tiger-coatings.com](http://www.tiger-coatings.com) in the download area, are an integral component of this data sheet.**

certified according to  
EN ISO 9001 / 14001



### TIGER Coatings GmbH & Co. KG

Negrellistrasse 36 | 4600 Wels | Austria

T +43 / (0)7242 / 400-0

F +43 / (0)7242 / 650 08

E [powdercoatings@tiger-coatings.com](mailto:powdercoatings@tiger-coatings.com)

W [www.tiger-coatings.com](http://www.tiger-coatings.com)