

UV Direct-to-metal Ink Series 140/3

Properties

Viscosity	25 °C	24-28 mPas
	50 °C	8-11 mPas
Surface tension	25 °C	22-26 dyn/cm
UV dose for hardening with a Hg lamp (type H)		500-1000 mJ/cm ²

Colors

- 140/31200 yellow
- 140/31300 magenta
- 140/31400 cyan
- 140/31800 black
- 140/31100 white

Shelf life

- 9 months for storage between 15 and 35°C.

Package sizes

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

Recommended cleaning and flushing fluid

TIGER Flush 151/00001

Applications

TIGER Direct-to-metal Inks are acrylate-based UV-curing systems that can be used to coat a wide range of rigid substrates melamine, stainless steel, aluminum, glass, anodized aluminum, steel, different plastic material. These inks were developed for use in DOD Piezo printing heads. The inks distinguish themselves through outstanding wet and dry adhesion on a wide range of substrates. Before application of the inks, the surface must be cleaned carefully to ensure that the surface is dust and grease-free. After printing on the pre-treated surface, the finished substrate/surfaces can be used immediately or further processed. Although the printed ink coatings offer outstanding chemical and mechanical durability, these can be deformed in bending processes. To protect against dirt and grime during the bending process, we recommend that you apply protective films.

Printing conditions

The inks can be processed at up to 55 °C. The necessary UV dose is oriented according to the printed layer thickness, whereby the previously specified 500-1000 mJ/cm² corresponds to the typical radiation dose of a non-doped mercury vapor lamp of type H with a coating 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
- Plasterboard box
- MDF sheets
- Particle boards
- Aluminum boards

Incompatible materials:

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

Disclaimer

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