

TIGITAL® UV-LED Outdoor Ink

Series 134/1.1 – inorganic pigmented

Properties

Density	25 °C	1.01 – 1.25 g/cm ³
Viscosity	50 °C	8 – 11 mPas
Surface tension	25 °C	22 – 28 dyn/cm
UV dose for curing with UV-LED lamp (395 nm) ⁽¹⁾	Multi-pass Single-pass	1,500 mJ/cm ² 2,500 mJ/cm ²
Recirculation required for	all inorganic pigmented colors that are used. Varnish and black do not need to be circulated.	

(1): This dose is a guide value, but can deviate depending on the substrate and process. Therefore, the user is responsible for checking the dose accordingly, depending on the printing system and substrate used, and adjusting it individually.

Colors

- 134/11001 – varnish
- 134/11002 – varnish flex
- 134/11101 – inorg. white
- 134/11801 – black
- 134/11901 – inorg. yellow
- 134/11111 – inorg. cyan
- 134/11131 – inorg. red
- 134/12121 – inorg. pink
- 134/11151 – inorg. green

Shelf life

12 months when stored between 15 and 35°C in unopened original container.

Package sizes

- 1 l PE bottle (black)
- 5 l PE container (black)
- Other package sizes are available on request

Recommended cleaning and flushing fluid

TIGER Flush 151/00001

Typical applications

TIGITAL® UV-LED outdoor 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 with integrated circulation. These inks are suitable for outdoor use when applied to a suitable substrate. All pigments used have an inorganic basis and allow for outdoor use of up to 10 years when overprinted with varnish 134/11001. Weather fastness can be improved further through the use of appropriate overcoating. The 134/1.1 series exhibits a lower degree of cross-linking and is optimized for flexible substrates or substrates with a higher thermal expansion coefficient. In keeping with the Level 2 requirements of Qualideco, these inks have also been certified externally by the Institute for Surface Technology (Institut für Oberflächentechnik, IFO).

CAUTION: SHAKE INKS WELL BEFORE FILLING THE PRINTER, as inorganic pigments have a tendency to settle. Recommended duration, e.g. with spinINK (People & Technology): 3 hours.

Condensation climate test (DIN EN ISO 6270-2:2018)	1000 h	fulfilled
Boiling test according to Qualideco (ED. 2017) method 2 with cross-cut test (DIN EN ISO 2409:2013)	1 h	fulfilled
Xenon-arc lamp accelerated weathering test (DIN EN ISO 16474-2:2014); gray scale evaluation (ISO 105-A02:1993)	9000 h	fulfilled
Florida weathering in accordance with ISO 2810 with 5° angle of orientation towards the south	4 years	fulfilled

The tests listed were performed on glass, with the colors overprinted with varnish 134/11001.

Material compatibility with regard to printer parts

Typical compatible materials:

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

Generally incompatible materials:

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

ALL MATERIALS AND COMPONENTS THAT COME IN CONTACT WITH THE INK MUST BE TESTED BY THE USER FOR SUITABILITY AND COMPATIBILITY.

Product data sheet

Disclaimer

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certified according to
EN ISO 9001 / 14001
IATF 16949



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