

**INK, HEART & SOUL**

## **TECHNICAL DATA SHEET**

# **SICURA JET G2 Varnish**

High Performance single-pass UV-curable protective  
varnish for drop-on-demand inkjet printing

## SICURA Jet G2 Varnish

The SICURA Jet G2 Varnish is an UV-curable high performance jettable protective overprint varnish solution designed for industrial inkjet printing on multiple applications, including decorative printing, direct-to-shape printing, packaging and label printing.

The SICURA Jet G2 Varnish has been developed for single-pass, piezo, drop-on-demand industrial inkjet printing at high resolution using printheads from Kyocera, Fuji Samba, Epson or Ricoh (MH5220).

This varnish can be used for printing on rigid as well as thin and flexible materials or in direct-to-object printing projects.

The SICURA Jet G2 Varnish is designed for extremely good adhesion on the Siegwerk SICURA Jet G2 ink series. It provides an excellent scratch resistance and protects the ink from external factors.

This product can be customized and adapted to end-user applications. If needed, Siegwerk can tailor varnish properties (e.g. viscosity & adhesion) and even address further special customer requirements. Depending on the application, Siegwerk can also advise on suitable primers.



## Field of use

The SICURA Jet G2 Varnish is designed for single-pass inkjet printing with piezo drop-on-demand printheads including printheads from Kyocera, Fuji Samba, Epson or Ricoh (MH5220) which require low viscosity inks/varnishes/primers. It is NOT recommended for thermal inkjet, continuous inkjet of any kind or any other print technology systems. In any case of uncertainty, please contact our application technology experts via [contact.inkjet@siegwerk.com](mailto:contact.inkjet@siegwerk.com).

## Key benefits

CHARACTERISTIC	BENEFIT
<b>Jetting performance</b>	The product is formulated for high performance piezo drop-on-demand printheads requiring low ink viscosity. Well suited for high resolution jetting at high frequencies. Good storage stability.
<b>Dried film performance</b>	Excellent adhesion and flexibility on a broad range of substrates. High scratch resistance.
<b>Safe to use</b>	Secure formulation without hazardous substances (CMR) to ensure safe handling.
<b>Shelf life</b>	Long shelf life (12 months from production date).

## Functional Specifications

- Single-pass wet-in-wet printing or printing using intercolor pinning
- High curing speed with bulbs and/or UV LED
- Excellent scratch resistance.
- Printing on a broad range of plastic materials as well as other types of materials
- Product parameters suited for jetting with industrial piezo print heads requiring low viscosity range
- Very good storage stability, long shelf life
- Good jetting reliability and low print head maintenance need
- Suited for binary print mode (including large drop size)

Note: the print conditions depend upon the choice of substrate, print mode, print resolution, print speed, printhead, throwing distance, etc.

## Shelf life & storage conditions

- Shelf life is 12 months from production date when stored under recommended condition
  - Storage properly closed in Siegwerk bottles/cans
  - Temperature control between 4 °C – 23 °C (39 °F – 73 °F)
  - No direct sun light
  - Not close to heating elements and UV-light containing radiation sources
- Product should be homogenized before usage
- Before filling the SICURA Jet G2 Varnish in new ink systems, rigorously flushing is recommended
- Siegwerk products should not be mixed with any other products, used together with any non SICURA Jet G2 flush or get diluted
- It is advisable to turn over the inventory according to the delivery date (first in – first out)

## Auxiliary products

We recommend our SICURA Jet G2 flush as a cleaning solution. Please consult with our sales team for further specific recommendations.

## Safety Information

Material safety Data Sheets for SICURA Jet G2 Varnish are available according to EC regulation 1907/2006, informing in detail about all relevant safety data, including labeling according to the present EEC regulations as to health and safety labeling requirements.

The SICURA Jet G2 Varnish is fully compliant with the REACH Regulation including the special provisions concerning SVHC (Substances of Very High Concern - most recent update January 17, 2023).

### **SICURA Jet G2 Varnish recipe does not comprise:**

- CMR 1 & 2 substances as listed in Annex VI of CLP-regulation 1272/2008
- 2-isopropyl thioxanthone (ITX)
- Benzophenone, 4-Methyl-benzophenone, 4-Hydroxy-Benzophenone
- NMP
- Heavy metals : Lead, Chromium, Cadmium, Mercury

The Ink Safety Portal on our homepage offers condensed knowledge on crucial Product Safety and Regulatory topics with regard to printing ink ingredients, regulatory affairs, exposure assessments and safety evaluations. You can access this via the following link:

[www.Siegwerk.com/ink-safety-portal](http://www.Siegwerk.com/ink-safety-portal)

**Note:** Our technical advice whether spoken, written, or through test trials, corresponds to our current knowledge about our products and their use. This is not meant as an assurance concerning certain properties of the products nor their suitability for each application. Our customers are therefore obliged to conduct their own tests with our supplied products to confirm their suitability for the desired process or purpose. The selection and testing of the ink for a specific application is exclusively the customers' responsibility. This data is communicated for information purposes only and is provided without any warranty on our part. We disclaim any liability for applications for which this ink series is not foreseen. If you have any questions, please do not hesitate to contact us at [contact.inkjet@siegwerk.com](mailto:contact.inkjet@siegwerk.com)