

# GFT4600 Flexo Conductive Graphite Ink

## **Product Description**

GFT4600 Flexo Graphite Ink is water-based graphite conductive ink designed for the production of conductive layers onto a variety of substrates via flexographic printing.

GFT4600 is appropriate for paper and cardboard substrates and also water-receptive polymer films and provides a unique combination of high-speed printability, fast drying, and conductivity in an easy-to-use ink system. GFT4600 can also be printed on plastic films bearing a water-receptive primer.

# **Typical Properties**

Pigment	Graphite/Carbon
Viscosity (Brookfield RVT, 20RPM)	1300-1700 cP
Specific Gravity	1.09 g/cm <sup>3</sup>
Sheet Resistivity*	<200 Ohms/sq

<sup>\*</sup>flexo printed on SBS board with 18 bcm anilox roll

# Processing and Handling Guidelines

Relevant Safety Data Sheet (SDS) should be read carefully prior to using this product.

#### **PRINTING**

GFT4600 is supplied as ready-for-use ink. Soft sediment may occur over time so thorough mixing prior to use is necessary. The ink may be diluted with water up to 3%, however sheet resistivity will increase slightly. Dilute with caution!

The below details are only a guide, and the final choice of flexo printing specifications may depend on substrate and web speed. To achieve maximum coverage, high volume anilox rolls are recommended (80-120 lpi with 14-22 BCM).

Continuous anilox rotation is required throughout the print run to avoid ink drying on flexo plate and anilox roll. GFT4600 should not be allowed to dry completely on printing equipment. Prompt cleaning with water is highly recommended. Anilox rolls should be also cleaned using a sonicating bath after each print run.

### **DRYING**

GFT4600 is a fast drying ink that will dry to the touch between 150-300 feet per minute using standard dryers found on flexographic presses. Maximum conductivity can be achieved with further drying, inline or offline, using infrared (IR) dryers, high capacity forced hot air ovens and/or heated mandrels. Optimum drying conditions should be established for particular equipment used by the customer.

### STORAGE AND SHELF LIFE

When stored in sealed containers at temperatures between 4-30°C (39-86°F), GFT4600 has a shelf life of 12 months in an unopened and sealed container. Protect from freezing.

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