

## IcoDisc ZKHF

Halogen Free Ink for Optical Media

Issue No. 001/2017

**IcoDisc ZKHF is a specially formulated ink system to be halogen free with respect to current environmental standards. Suitable for print production on to CD, DVD and Blu Ray Disc. IcoDisc ZKHF is at the leading edge of optical media development.**

### Accelerated Life Testing

When printed and cured in accordance with our recommendations onto compatible discs, **ZKHF** may be expected to pass any of the artificial ageing and environmental tests that are typically used throughout the Optical Media Manufacturing Industry. Typical test conditions are 60 °C and 95% relative humidity for 500 hours followed by assessment of visual appearance, adhesion and hardness tests as well as a full evaluation of all relevant electronic properties.

### Spin-coat lacquers

**IcoDisc** Screen inks are designed for printing over most commonly available spin-coat lacquers. Because of the wide variations in the chemistry of spin-coat lacquers and the differences in adhesion between on-line and off-line machine configurations, printers should ensure that the inks and lacquer are compatible before starting a production run.

### Colour Range

<b>ZKHF001</b>	Black
<b>ZKHK004</b>	Process Black
<b>ZKHK052</b>	Dense Black
<b>ZKHK064</b>	Process Yellow
<b>ZKHK066</b>	Yellow
<b>ZKHK114</b>	Orange
<b>ZKHK121</b>	Red (Yellow Shade)
<b>ZKHK164</b>	Red (Blue Shade)
<b>ZKHK165</b>	Magenta
<b>ZKHK135</b>	Process Magenta
<b>ZKHK215</b>	Process Cyan
<b>ZKHK230</b>	Blue
<b>ZKHK325</b>	Green
<b>ZKHK396</b>	Extended Base
<b>ZKHK025</b>	Opaque White

Available in 5Kg containers.

### Thinner

<b>ZE637</b>	Thinner
<b>ZE808</b>	Gel Additive

Available in 5Kg and 1Kg containers.

### Main Characteristics

#### Finish

Gloss.

#### Curing

Designed for printing and curing on all modern printing machines, equipped with medium pressure mercury vapour lamps or fusion units.

#### Thinning & Wash-up

No thinning is required as **ZKHF** is designed to be press ready. Up to 10% **ZE637** Thinner and up to 20% **ZE808** Gel Additive can be added as necessary.

**ZKHF** can be washed up with Screen Wash Universal **ZTC639**. Cleaners containing mineral oil should not be used.

#### Mesh

No. 150.31 PW

#### Stencil Systems

Most direct stencil emulsion materials designed for UV inks are suitable.

#### Recommended:

**Dirasol 915, 916** - UV resistant graphic emulsions.

#### Mileage in Product

#### Ink System Mesh Count Disc/kg \*

150.31PW 7500 – 8000

\* Figure calculated for printing a full coverage 'Donut'.

#### Co-use with other inks

**ZKHF** has been formulated to enable both under and over printing with other **IcoDisc** ink range

**IMPORTANT:** Stir well before every use. Always test application fully before beginning production run as there is often considerable variance in substrates from different manufacturers and even between different batches.

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### Storage

Containers should be tightly closed immediately after use. At the end of long printing runs surplus ink should be disposed of. IcoDisc inks are not classified as a 'dangerous substance' under the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR)

**IcoDisc inks should not be stored in direct sunlight or near sources of heat and should be kept away from peroxides.**

For maximum shelf-life, storage should be between 10°C and 25°C. Stored in a cool environment the inks have a shelf-life of approximately 18 months from the date of manufacture.

### Safety and Handling

Comprehensive information on safety and handling is given in the MSDS for this product, available on request.

### Environmental Information

#### IcoDisc ZKHF

- Does not contain ozone-depleting chemicals as described in the Montreal Convention.
- Is formulated free from halogens and aromatic hydrocarbons.
- Is also free of any volatile solvent and has less impact on the environment, when compared with traditional solvent-based products.
- Is formulated free from lead and other heavy metals and therefore should comply with EN71-3:2013 Toy Safety Standard and RoHS "Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment."

The information and recommendations contained in this Product Information sheet, as well as technical advice otherwise given by representatives of our Company, whether verbally or in writing, are based on our present knowledge and believed to be accurate. However, no guarantee regarding their accuracy is given as we cannot cover or anticipate every possible application of our products and because manufacturing methods, printing stocks and other materials vary. For the same reason our products are sold without warranty and on condition that users shall make their own tests to satisfy themselves that they will meet fully their particular requirements. Our policy of continuous product improvement might make some of the information contained in this Product Information sheet out of date and users are requested to ensure that they follow current recommendations.

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