

Opaltone® is a patented imaging technology that digitally mixes CMY+RGB process inks. Black (K) ink is optional. The design & cost benefits are obvious. More colors from less ink. The same inks are always used (just like your color copier). The environmental benefits are also obvious. There is no waste. Opaltone users are already helping to reduce the millions of spot color inks stockpiled across our planet. You can do the same. An expanded gamut and a greener planet. Welcome to the future of print.

Jikelele is a new, 100% alcohol soluble ink system which displays impressive bond strengths (over 500g per 15mm) and allows for lamination constructions of the highest quality.

Jikelele shows success in retortable packaging, shrink, pasteurisation as well as standard lamination applications. The system also has properties exceeding alternate products currently available in the global market place.

Jikelele is a range of Flexographic and Gravure inks for printing on a variety of different substrates which means that only one ink system needs to be stocked for lamination jobs. These inks are supplied at low viscosity and very high strength and are modified with wax additives to print surface on most substrates.

Properties

- · Excellent printability, high strength and resolubility
- Excellent bond strengths
- Low solvent retention/low odour
- Can run at speeds from 60 to 500 metres per minute
- Jikelele inks must only be used after trial and approval and are suitable for indirect contact for food packaging
- Suitable for retort and boil in bags, but here again, trial and approval are a necessity (prior tests on customer specific substrates to be conducted by Hi-Tech Inks)
- Extremely stable, because of solvent reduction being a single solvent group, solvent balance is stable and does not require ratio balances
- Better productivity due to higher press speeds than conventional inks
- Added mileage benefits
- Low VOCs
- Low print grammage with increase in bond strengths
- Can be modified to surface print on a variety of substrates depending on the end use

- With the addition of an additive, this ink can be used for both oleic acid and deep freeze resistance, this being achieved with one ink system
- (substrates and products to be supplied to HTI prior to use to ensure product resistance is achieved)
- Excellent printability and transfer
- High strength at low solids

Opaltone® offers the Designer many, many advantages including:

- Infinite design flexibility
- Increased color range
- Brilliant clean colors
- Unlimited color options per print run
- ullet Multi streaming of packaging
- Low cost inkjet proofing solution
- Easy remote proofing
- You control the design's destiny not the printer
- $\bullet \ Environmentally \ friendly \ package \ printing \ system$
- Environmentally friendly inkjet proofing



Substrates

Applicable on all Polyesters (treated, untreated, chemically treated, PVDC coated), Nylon, PT Cellophane, PVDC coated films,

Polyethylene, PVC Shrink/Stretch and BOPP. (Jikelele can be modified to print on all substrates).

This ink system is suitable for adhesive (both solvent based and solvent free) and extrusion lamination. (Please consult our technical team before use).

Solvent Retention

Jikelele has been formulated to have extremely low solvent retention for all food grade applications

Printability

This ink system has excellent rewetability and has excellent reproduction of half tone even at high speed.

Reduction

Gravure Inks: To be reduced to a minimum viscosity of 18-23 sec Zahn^{#2} to maintain functionality. To be reduced to a minimum viscosity of 20-25 sec Zahn^{#2} to maintain functionality.

Flexo and Gravure will be supplied at 20-25 sec Zahn^{#2} and should be used to reduce ink strength before solvent is added.

Flexo: Whites: Ethanol

Colours: Dowanol, Ethoxy Propanol, Meths

Gravure: Whites: Ethanol

Colours: Ethanol/Ester Blends (Dowanol or Ethoxy Propanol may be used if necessary).

NB: Slow solvents must be used with caution

Wash Up: Meths

Press speeds:

Jikelele inks will print from 60 to 500 m/minute according to reducers used. White is supplied at low viscosity to ensure that the correct film weight is printed and that maximum bond strength is achieved.

Colour Range:

	С	М	Y	R	G	В	K	Tolerance
L*	57	50	90	59.6	63	40.5	26	±2
C *	60.5	72	90.9	79.1	74.9	55.6	2	±2
h⁰	235	355	94	37	158	274	N/A	±2
D	1.25	1.25	0.95	1.15(Y)	1.15(C)	1.25(C)	1.3	±0.03

Note: Any particular pigment resistance requirements (e.g. light fastness, chemical resistance etc.) should be identified at time of ordering.

Supply Specifications

Colours: 20-30 sec Zahn #2 Mediums: 20-25 sec Zahn #2 White: 25-35 sec Zahn #2

Colours are supplied at print viscosity to ensure the correct film weight is printed and that maximum bond strength is achieved.

BCF

These inks have been formulated in accordance with the recommendation of the British Coatings Federation.

Waste Disposal

Care should be exercised in the disposal of printing ink waste. This should be carried out in accordance with good industrial practices observing all the appropriate regulations, including the relevant guideline notes to the Environment Conservation Act and Regulations, (73/1989).

Health and Safety

Full details appear on the Material Safety Data Sheets.

The information outlined in this data sheet is given in good faith but does not constitute a guarantee. Since conditions of handling and application are beyond our control, the converter should assure himself of the suitability of the product for the particular end use.

It is recommended that advice be taken from Hi-Tech Inks' Technical Department for all new applications and it is preferable for trials to be carried out before full production runs are commenced.