

## TECHNICAL BULLETIN

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# ***i*-FAST**

## FLEXOGRAPHIC INKS FOR OUTDOOR APPLICATIONS

*i*-FAST is an alcohol based printing ink system designed for the surface printing of film for outdoor applications. *i*-FAST exhibits excellent printability and good colour strength for lightfast colours as well as outstanding weatherability.

### Characteristics

- Offers good adhesion on many treated substrates (minimum surface tension 38 dyne/cm<sup>2</sup>)
- Clean and sharp printing
- Good gloss
- Good rub and scuff properties when used with *i*-FAST LS Overprint Varnish FSPE09326
- Outstanding weather resistance and lightfastness
- Low slip

### Substrates

- Treated polyethylene

### Typical Applications

- *i*-FAST is designed for the printing outdoor of industrial and consumer applications, such as grass seed, soil, compost or fertilizer
- *i*-FAST may be used for printing cedar mulch bags when overprinted with *i*-FAST LS Overprint Varnish (FSPE09326)
- *i*-FAST may be used for other outdoor applications when printed on film

Revised: January 19, 2011

## Base Colours

• <i>i-FAST</i> Extender	FSDE04108
• <i>i-FAST</i> White	FSDW09327
• <i>i-FAST</i> Yellow	FSDY06542
• <i>i-FAST</i> Y/S Red	FSDR04112
• <i>i-FAST</i> Pink	FSDR04114
• <i>i-FAST</i> Violet	FSDP04115
• <i>i-FAST</i> Blue	FSDB04116
• <i>i-FAST</i> Green	FSDG04117
• <i>i-FAST</i> Black	FSDK04118

## Process Colours

<i>i-FAST</i> Process Extender	FSDE04123
<i>i-FAST</i> Process Yellow (3.5 bcm)	FSDY06552
<i>i-FAST</i> Process Magenta (3.5 bcm)	FSDR04120
<i>i-FAST</i> Process Cyan (2.5 bcm)	FSDB04121
<i>i-FAST</i> Process Black (2.5 bcm)	FSDK04122

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## Technical Data

<b>Viscosity</b>	Shipping Viscosity: 35 - 55 seconds Signature Zahn #2 Running Viscosity: 23 - 27 seconds Signature Zahn #2
<b>Anilox</b>	Line Colours: Good colour strength may achieved with volumes of 6.0 bcm or more. Some strong colours may require more volume due to the nature of the weather resistant pigments used.
<b>Plates</b>	Buna N (synthetic rubber), natural rubber & photopolymer
<b>Reducer</b>	Fast: 60/30/10 2A alcohol/n-propanol/n-propyl acetate Regular : 45/45/10 2A alcohol/n-propanol/n-propyl acetate Slow : 60/30/10 n-propanol/2A alcohol/n-propyl acetate
<b>Clean up</b>	Same as Reducer
<b>Shelf Life/ Storage</b>	Approximately one(1) year depending on storage conditions and use. Store between 15°C to 30°C. Do not allow to freeze. Agitate well before use.

**CAUTION \* CAUTION \* CAUTION \* CAUTION \* CAUTION \* CAUTION \* CAUTION \* CAUTION**

1. Resistance and slip properties reach their maximum 48 hours after printing. Any testing on printed film should take this into account.
2. Cannot be laminated.
3. Due to the availability of a wide range of substrates, it is recommend that the substrate be pre-tested and verified at the beginning of the press run.
4. The substrate must be treated to at least **38 dyne/cm<sup>2</sup>** for the ink to have acceptable adhesion and rub resistance.
5. Over reduction of this ink system may result in the loss of certain resistance properties. To maintain optimal resistance properties, do not reduce the ink below the minimum running viscosity noted above.
6. Slip and resistance properties are optimized through the use of an overprint varnish.
7. Ink film properties improve with increasing ink film thickness. It is recommended that anilox volume be the maximum for the type of printing (ie: solid or screen) being done.
8. *i*-Fast inks may fail when exposed to cedar oil under conditions of high temperature and pressure.  
**FOR THIS REASON, *i*-FAST INKS MUST BE OVERPRINTED WITH *i*-FAST LS OVERPRINT VARNISH (FSPE09326) WHEN USED FOR CEDAR MULCH BAGS.**

Pemla cannot anticipate all conditions under which this information and our products may be used. All printing applications should be tested before using on a press. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products, either alone or in combination with other products. Please contact Pemla technical personnel for more information.

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