

TECHNICAL BULLETIN

i-AQUAFILM

WATER BASED NARROW WEB FLEXOGRAPHIC PRINTING INKS FOR THE PRINTING OF NON-POROUS SUBSTRATES

i-AQUAFILM is a water based surface printing ink series formulated for printing high quality tags and labels on plastic films. This high performance ink, designed for especially for narrow web printing, exhibits excellent transfer and printability on a wide variety of presses. Especially when used with an overprint varnish, *i*-AQUAFILM provides high quality results with excellent resistance properties.

Characteristics

- High color strength
- Excellent gloss
- Great press stability
- Excellent printability

Substrates

- Most common film substrates (prior testing is recommended)
- Coated or uncoated paper

Typical Applications

- *i*-AQUAFILM is formulated for the narrow web flexographic printing of tags and labels.

Base Colours

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| • <i>i</i> -AQUAFILM Extender | FWNE03677 |
| • <i>i</i> -AQUAFILM White Monobase | FWNW03678 |
| • <i>i</i> -AQUAFILM Yellow Monobase | FWNY03679 |
| • <i>i</i> -AQUAFILM LF Yellow Monobase | FWNY03680 |
| • <i>i</i> -AQUAFILM Orange Monobase | FWNY03681 |
| • <i>i</i> -AQUAFILM Warm Red Monobase | FWNR03682 |
| • <i>i</i> -AQUAFILM LF Warm Red Monobase | FWNR03683 |
| • <i>i</i> -AQUAFILM Rubine Red Monobase | FWNR03684 |
| • <i>i</i> -AQUAFILM LF B/S Red Monobase | FWNR03686 |
| • <i>i</i> -AQUAFILM Rhodamine Red Monobase | FWNR03685 |
| • <i>i</i> -AQUAFILM Violet Monobase | FWNP03687 |
| • <i>i</i> -AQUAFILM LF Violet Monobase | FWNP03688 |
| • <i>i</i> -AQUAFILM Blue Monobase | FWNB03689 |
| • <i>i</i> -AQUAFILM Green Monobase | FWNG03690 |
| • <i>i</i> -AQUAFILM Black Monobase | FWNK03691 |

Process Colours

- *i-AQUAFILM* Process Extender FWNE04055
- *i-AQUAFILM* Process Yellow (2.2 bcm) FWNY04050
- *i-AQUAFILM* LF Process Yellow (2.2 bcm) FWNY04181
- *i-AQUAFILM* Process Magenta (2.2 bcm) FWNR04051
- *i-AQUAFILM* LF Process Magenta (2.2 bcm) FWNR04183
- *i-AQUAFILM* Process Cyan (2.2 bcm) FWNB04052
- *i-AQUAFILM* Process Black (2.2 bcm) FWNK04053

Technical Data

Viscosity	14" to 18" EZ Zahn # 3 cup (press ready)
pH	8.8 to 9.5; pH may be maintained during a run with the addition of pH Control Additive OWAE02474
Anilox	Strong solid colours may be printed using volumes of 3.7 bcm or more Lightfast colours may require more volume, depending on the colour, due to the nature of the pigments used.
Plates	Rubber or photopolymer
Press Speed	200 fpm for in-line printing on film
Reducer	FWNE03677 <i>i-AQUAFILM</i> Extender FWNE04055 <i>i-AQUAFILM</i> Process Extender for process and screen printing
Defoamer	PWAE00127 WB Defoamer. Apply sparingly over the ink reservoir using a spray bottle.
Clean up	Magic Clean Extra Conc MGC-1 (OWSE02667) Blend of MGC-1 & warm water (50/50)
Shelf Life/ Storage	Approximately one (1) year depending on storage conditions and use. Store at room temperature. Do not allow to freeze. Stir well before use.

CAUTION * CAUTION * CAUTION * CAUTION * CAUTION * CAUTION * CAUTION * CAUTION

1. Excessive additions of defoamer PWAE00127 may cause surface defects. Add only as directed.
2. Mixed colours are typically not permanent. Colours will be matched for optimal lightfastness upon request. *i-AQUAFILM* is not recommended for outdoor applications.
3. Excessive additions of pH Control Additive OWAE02474 may retard drying and inhibit moisture resistance. Use only as directed.
4. Adhesion and resistance properties of the printed ink film are affected by the surface treatment of the substrate. For optimal results, film stock must have a minimum treatment level of 38 – 40 dynes.

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.