



WILFLEX® QuantumOne™
Non-PVC / Non-Phthalate ink

DESCRIPTION

Wilflex® QuantumOne™ is a non-phthalate, non-PVC Plastisol screen printing ink system. The inks have been specially formulated by Wilflex® in the USA to provide printers with the same print application parameters as a vinyl plastisol ink system without having to change any of the standards associated with printing equipment, dryers or the printing of the ink.

It is available as an easy-to-use, 15 color mixing system, which enables printers to produce simulations of coated and uncoated PANTONE® Color System colors.

In addition, there is a direct print QuantumOne™ Cotton White, which can be used as an under-print and a last down white ink.

The QuantumOne™ inks produce a matte finish and have been designed for high-speed print production.

The inks can be used for print-flash-print application as well as wet-on-wet printing.

PRINTER'S PARAMETERS

Substrates	100% cotton, cotton blends, some synthetics
Bleed resistance	None
Mesh (on darks)	86-125 t/in (34-48 t/cm)
Mesh (under basing)	110-156 t/in (43-61 t/cm)
Mesh (fine line)	156 to 305 t/in (61-120 t/cm)
Tension (newtons)	25-35 recommended
Stencil emulsion	Direct, indirect & capillary
Off-Contact	1/16 th inch
Squeegee type	70 durometer. or triple (70/90/70) (60-90-60)
Squeegee angle	Avoid excess pressure Should not be vertical
Squeegee speed	Maximum
Gel temp	220 F (104 C)
Cure temp	340 F (171 C) entire film
Extender	10-20% (by weight) Q1 Extender Base I5010Q1
Reducer	1-3% (by weight) Viscosity Buster #10025VB
Emulsion	Phthalate-Free
Storage	65-90 F (18-32 C). Avoid direct sun. Use within 1 year
Wash-up	Wilflex Screen Wash
Health & Safety	Available upon request

FEATURES

- Optically bright white
- Matte finish
- Prints through fine meshes
- Use as a first-down, under base flash white or an overprint stand-alone white.
- Odorless

SPECIAL RECOMMENDATIONS

- Squeegee and flood-bar must completely clear the screen print image/design during the printing application.
- The squeegee and flood-bar must evenly deposit the ink across the entire print image area.
- The angle of squeegee during print application should not be vertical.
- Print platen should be flat and level before commencing print application.
- The print platen must be free of fabric fiber otherwise the cured ink surface will not be flat in appearance and be rough in texture.
- The ink must be fully cured first time. Repeated ink drying will not assist the cure of the ink, as the first drying process establishes the ink film and tensile strength.
- The QuantumOne™ inks are NOT compatible with the Wilflex® Epic phthalate-free color mixing system or other commercially available modifiers not carrying the Wilflex® QuantumOne™ brand name.
- Colors will reproduce best on white or light ground fabrics.
- Variation of screen mesh and ink deposit can result in loss of color depth and opacity.
- Increasing ink film deposit can reduce fabric fibrillation, use a flash cured first down white ink. Decrease squeegee pressure on second print stroke, and be sure that the print platen is flat and without fiber debris.
- Stir inks well before use in screens
- Any application not referenced in this product information bulletin should be pre-tested or consultation sought with Wilflex Technical Services Department prior to printing
- (US - 800-326-0226).
www.techserviceswilflex@polyone.com

Effective 05/11/2004. Not all Wilflex products are available in every country. The information in this publication is based on information and experience believed reliable. Since many factors may affect processing for an application, processors must carry out their own tests and experiments to confirm suitability for intended use. You must make your own determination of suitability for your intended use and environmental acceptability, the safety and health of your employees, and purchasers of your product.

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ORDERING INFORMATION

COLOR RANGE:

15 intermixable colors and a Cotton White. QuantumOne™ colors are created to mirror the MX Mixing colors. For PANTONE® colors simply follow the MX formulas in the Wilflex® MX Formula Guide. See separate color range information guide.

COLOR MIXING GUIDELINES

QuantumOne™ colors are created to mirror the Wilflex® MX Color Mixing system. For PANTONE® simulations, simply follow the MX formulas in the Wilflex® MX Formula Guide. Formulas that reproduce PANTONE® color simulations have been calculated by weight and are presented as a total of 1,000 grams in the Formulation Guide. The final volume of ink produced from these formulas will vary according to color and the specific gravity of the ink concerned, but all formulas will make approximately 1 quart/1 liter.

PLEASE NOTE: Isolated PANTONE colors may exhibit subtle color/hue differences compared to MX formulations due to inherent variables between chemistries of inks.

11888Q1 QuantumOne White
88888Q1 QuantumOne Yellow
48889Q1 QuantumOne Magenta
58888Q1 QuantumOne Violet
68888Q1 QuantumOne Marine
68889Q1 QuantumOne Blue
78888Q1 QuantumOne Green
19888Q1 QuantumOne Black
48888Q1 QuantumOne Red
38888Q1 QuantumOne Orange
98884Q1 QuantumOne FI Red
98886Q1 QuantumOne FI Blue
98888Q1 QuantumOne FI Yellow
98880Q1 QuantumOne FI Pink
98885Q1 QuantumOne FI Purple
10000Q1 QuantumOne Clear
11000Q1 QuantumOne Cotton White
15010Q1 QuantumOne Extender Base

NON-CONTAMINATION OF INK

- DO NOT add or mix, PVC containing ink with QuantumOne™ inks
- Use only QuantumOne™ inks and QuantumOne™ additives together.
- Do not dilute or modify the inks with additives other than those recommended by PolyOne.
- When mixing inks, all buckets, palette knives and mixing apparatus must be cleaned properly and free of PVC inks
- All squeegees, flood bars and screens must be cleaned properly and be free of PVC inks. Use Wilflex® Screen Wash or other recommended cleaner for this purpose.
- It is important that you follow the manufacturers product instructions concerning the use of non-ink products with a phthalate and PVC free ink.

ENVIRONMENTAL FOCUS

- Inks contain non-phthalate plasticizers
- Free from PVC containing resins
- Free from lead and other heavy metals – tested to comply with EN71-3, Toy Safety Standard.
- IMPORTANT - QuantumOne™ color mixing system is manufactured in the USA under the strictest conditions possible. However the possibility of low-level contamination during the manufacturing process does exist.

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