

Product Guide

NPT Inks



W.M. PLASTICS

Servicing The Industry Since 1983

INK MANUFACTURING COMPANY

Service Driven, Quality Focused & Economically Priced

www.wmplasticsinc.com

What We Do:

WM Plastics has been a leading manufacturer of quality textile inks since 1983. For over 30 years WM Plastics has catered to the screen printing industry by providing a variety of products which include: top of the line whites, blacks, special effect inks, mixing systems, additives, bases and the ability to match any color possible in the spectrum. WM Plastics has grown tremendously over the years through dedication to customer service, quality of products and economical pricing, all key areas enabling us to reach customers throughout the United States, China & India.

Service Driven, Quality Focused, and Economically priced (three reasons to trust us with your business), says it all!!! From placing an order to receiving your order in a timely fashion, as the customer, WM Plastics is dedicated to you. We stand behind our business and products with a team that is devoted to making your experience a pleasant one, enticing you to come back again and again.

All Purpose Inks	2
High Opacity Inks	3
Low Bleed Inks	4-6
White Inks	7-15
Black Inks	16-20
Ink Matching System (PIM)	21
Bases & Additives	22-34
Lustre, Glitter & Metallic Inks	35
Glow-in-the-Dark Ink	36
4-Color Process Inks	37-38
Reflective Silver	39
Low Cure Inks	40-41
Low Cure Ink Matching System	42
Standrad Color-Card	43-45
PIM Color-Card	46
Certificate of Compliance	47-51
Disclaimer	52



W.M. PLASTICS

Servicing The Industry Since 1983

5301 Terminal St
Charlotte, NC 28208
1-800-535-4657 (Inks)

www.wmplasticsinc.com

Revision: 05/01/2023 Version 40

Distributor List

Arizona

Buckets of Ink
906 S. Priest Dr.
Ste 101
Tempe, AZ 85281
480-229-7806
www.bucketsofink.com

California

District Screen Supply
4878 Pasadena Ave.
Unit 4
Sacramento, CA 95841
916-333-3271
www.districtscreensupply.com

Mel Mel Products Inc.
580 3rd St
Unit D
Lake Elsinore, CA 92530
951-698-2534

Colorado

MTN Screenprinting Supplies
4070 Globeville Road
Denver, CO 80216
303-295-0370
Sales@mtnscreenprintingsupplies.com

Florida

Florida Flex
2671 West 76 St.
Hialeah, FL 33016
305-512-2222
www.floridaflex.com

Hawaii

American T-Shirt Co
1217 North King St.
Honolulu, HI 96817
808-842-4466

Illinois

GDM Graphics
4222 S Archer Ave
Chicago, IL 60632
773-940-2212
www.gdmgraphics.com

Indiana

PMM Supply
604 Mill St.
Crawfordsville, IN 47933
765-359-0466
www.screenprinterswarehouse.com

Louisiana

Continental Screen Printing Supply
2110 31st Court
Kenner, LA 70065
504-461-8797
www.continentalscreenprintingsupply.com

Michigan

One Source
4420 Elms Rd.
Swartz Creek, MI 48473
810-635-8844
www.onesourcemichigan.com

Missouri

PMM Supply
604 Mill St.
Crawfordsville, IN 47933
765-359-0466
www.screenprinterswarehouse.com

Nebraska

Central Sign Supplies
4222 D Street
Omaha, NE 68107
800-999-3160
www.centralsignsupplies.com

New Hampshire

Quality Screen Supply
1 Chestnut Street
Suite 222
Nashua, New Hampshire 03060
978-500-4794
www.qualityscreensupply.com

New Jersey

CGS Sales & Service
6950 River Road
Pennsauken, NJ 08110
800-662-6154
www.screenprintsource.com

New York

Viking Solutions
80 East Montauk Highway
Lindenhurst, NY 11757
631-957-8000
www.mrshirt.com

North Carolina

Screenprint Resource
5301 Terminal St
Charlotte, NC 28208
800-535-4657
www.screenprintresource.com

Ohio

Ace Screen Supply Co.
1020 Hometown St.
Springfield, OH 45504
www.acescreensupply.com
order@acescreensupply.com
[800-222-3468](tel:800-222-3468)

Richardson Supply
2080 Hardy Parkway St.
Grove City, OH 43123
614-539-3033
www.richardsonsupply.com

Screen Printing Solutions
DBA Wildside North
2183 Youngstown Kingsville Rd
Vienna, OH 44473
234-244-4064
www.screenprintingsolutions.com

Pennsylvania

Tech Support Screen Printing Supplies
1441 Metropolitan St.
Pittsburgh, PA 15233
888-600-6789
www.techsupportps.com

Tennessee

Tennessee Screen Supply
1709 Oakway Circle
Columbia, TN 38401
931-486-2072

Distributor List Cont.

Texas

Herweck's Art Supply
300 Broadway
San Antonio, TX 78205
210-227-1349
www.herwecks.com

Lee's Screen Supply
10440 West Airport Blvd
Stafford, TX 77477
800-447-8874
Sales@leessupply.com
www.leessupply.com

Sunbelt Mfg.Inc
101 South Pine
Gladewater, TX 75647
903-759-5913
perry@sunbeltmfg.com
www.sunbeltmfg.com

Utah

Dolphin Mfg.
9529 South 560 West
Sandy, UT 84070
801-569-1001
www.performancescreen.com

Canada

Quebec

Graphic Textile Supply (GTS)
145 Barr Street, Unit 5
St-Laurent, Quebec
H4t 1W6
844-487-1145
www.graphictextilesupply.ca

Guatemala

Frem-Color, S.A.
Calzada San Juan 13-90 Zona 7
Centro Commercial La Quinta
Local 19
Guatemala
502-247-41671
Email: fremcolor@gmail.com

Realmen, S.A.
28 Calle 7-03
Zona 11
Col. Grania & Towson 1
Guatemala
809-221-6421/809-685-2257
Email: wbaez@pakcolonial.com
www.rotulpak.com

Puerto Rico

Lansi Del Caribe Corp.
#273 Camino De Las Margaritas
Gurabo, Puerto Rico
787-525-3951
adner00@yahoo.com

Non-Phthalate Plastisol Inks (Midori Series)

All Purpose (AP)

Applications

- Direct printing
- White or light colored garments
- 100% Cotton garments
- Cotton/Polyester, Acrylic & Polyester garments (with LB underlay)

Features

- Low build-up
- Easily releases from the screen
- Very soft hand

General Info:

All Purpose (AP) inks are formulated to be directly printed onto white or light colored, 100% cotton garments. AP inks can also be used on dark colored garments if an underlay is used; this is the suggested method for dark colored shirts to achieve a soft hand.

Bleed Resistance: None

Opacity: Low to Medium

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 110-305 (43 to 120 threads per cm)

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 3-5 seconds, just enough for the surface to be tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds. To reduce crocking on reds, they should be cured at higher temp or a clear printed as a top coat to seal the red.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Standard Colors:

(Refer to Standard Color-card for color reference)

JB-3125-AP	Dallas Gold	JR-5332-AP	Lt Navy
JB-3135-AP	Primrose	JN-5001-AP	Royal
JB-3122-AP	Lemon	JB-5013-AP	Marine Blue
JB-3209-AP	Yellow Gold	JW-5273-AP	Lt Royal
JB-3303-AP	Gold	JB-5042-AP	Brite Royal
JB-7109-AP	Brite Orange	JB-5104-AP	Lt Reflex Blue
JB-6056-AP	Brite Red	JB-5048-AP	Sky Blue
JB-6420-AP	Scarlet	JB-5120-AP	Lt Blue
JB-6247-AP	Cardinal	JB-5040-AP	Turquoise
JB-6251-AP	Maroon	JB-4030-AP	Dallas Green
JB-5525-AP	Violet	JB-4053-AP	Kelly Green
JW-5666-AP	Russ Purple	JB-4238-AP	Forrest Green
JB-5011-AP	Navy		

Non-Phthalate Plastisol Inks (Midori Series)

High Opacity (HO)

Applications

- Direct printing
- Medium to dark colored garments
- 100% Cotton garments
- Cotton/Polyester, Acrylic & Polyester garments (with LB underlay)

Features

- Low build-up
 - Easily releases from the screen
 - Very soft hand
 - High opacity for great coverage
-

General Info:

High Opacity (HO) inks are formulated to be directly printed onto medium to dark colored, 100% cotton garments. These inks provide great coverage and have a creamy body unlike most High Opacity inks, therefore making the ease of printing more simple.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-240 (34 to 110 threads per cm)

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 9 seconds, just enough for the surface to be tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds. To reduce crocking on reds, they should be cured at higher temp or a clear printed as a top coat to seal the red.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Standard Colors:

(Refer to Standard Color-card for color reference)

JB-7109-HO	HO Brite Orange	JB-4030-HO	HO Dallas Green
JB-6056-HO	HO Brite Red	JB-4053-HO	HO Kelly Green
JB-5013-HO	HO Marine Blue	JW-6501-HO	HO Panther Pink
JB-5042-HO	HO Brite Royal	JW-6008-HO	HO Drake Red
JB-5048-HO	HO Sky Blue	I-11-8520	HO Fls Lemon
JB-5120-HO	HO Lt Blue	I-11-8515	HO Fls Magenta
JB-5040-HO	HO Turquoise	I-11-8534	HO Fls Pink
JB-2250-HO	HO PMS Cool Gray 4C	I-11-8530	HO Fls Red
JB-2065-HO	HO Dk Brown	I-11-8532	HO Fls Green
JB-2060-HO	HO Nu Brown	I-11-8531	HO Fls Blue
JB-2050-HO	HO Lt Brown	I-11-8533	HO Fls Violet
JB-4000-HO	HO Mile High Green	I-11-8535	HO Fls Orange
JB-4003-HO	HO Spring Green		

Non-Phthalate Plastisol Inks (Midori Series)

Low Bleed (LB)/Poly

Applications

- Direct printing
- Medium to dark colored garments
- Cotton/polyester, 100% polyester & Nylon garments

Features

- Great body
 - Made with non-migrating pigments
 - Maintains viscosity during runs
 - High opacity for great coverage
-

General Info:

Low Bleed (LB) inks are formulated to be directly printed onto medium to dark colored, cotton/polyester blends, 100% polyester & nylon garments. These inks provide great coverage and have a creamy body unlike most bleed resistant inks, therefore making the ease of printing more simple. Please note that tightly woven nylon garments will require a nylon additive for adhesion.

Bleed Resistance: Great

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-180

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 9 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds. To reduce crocking on reds, they should be cured at higher temp or a clear printed as a top coat to seal the red.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed. WM Poly inks will appear to be thick in the container but will loosen up and become easier to print when the pallets are hot and the ink has been worked with the squeegee.

Standard Colors:

(Refer to Standard Color-card for color reference)

I-10-3014	Poly Primrose	JW-3040-LB	Poly Vegas Gold
I-10-3002	Poly Lemon	JB-2250-LB	Poly PMS Cool Gray 4C
I-10-3006	Poly Yellow Gold	JR-5332-LB	Poly Lt Navy
I-10-3001	Poly Lt Gold	JN-5001-LB	Poly Royal Blue
I-10-3372	Poly Gold	JW-5666-LB	Poly Russ Purple
I-10-9592	Poly Gray Underlay	JB-6247-LB	Poly Cardinal
I-11-6438	Poly Scarlet	JB-6251-LB	Poly Maroon
JB-6056-LB	Poly Brite Red	JB-2050-LB	Poly Lt Brown
JB-5048-LB	Poly Sky Blue	JB-7109-LB	Poly Brite Orange
JB-4053-LB	Poly Kelly Green		

Non-Phthalate/PVC Plastisol Inks
Low Bleed (LB)/Poly
I102011LB (Barrier Gray Underlay)

Applications

- Direct printing
- 100% Polyester garments

Features

- Superb Bleed Resistance
 - Great Stretchability
 - Easy to print viscosity
 - Flat, smooth finish for multi-color printing
 - Improves the feel of the final print
-

General Info:

Barrier Gray is a high opaque, low bleed ink that was designed to be used as an under base on 100% Polyester substrates. The product has been tested on a number of known substrates known to bleed, including digital camo garments, with great success.

Bleed Resistance: Excellent

Opacity: High

Storage: 70° to 80°F

Mesh: 80-160

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Not recommended

Modifications: Not recommended

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 3-5 seconds, just enough for the surface to be tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 260°F/126° C for 1 ½ - 2 minutes. 300°F/148° C for 1 to 1 ½ minutes.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Printing Tips

As today's garments become more difficult to print on it becomes increasingly important that printing and curing parameters be monitored to ensure the most success on these substrates. Each type of substrate will have different printing requirements. Below is a quick outline of suggestions to yield a higher success rate for each type.

Non-Phthalate/PVC Plastisol Inks
Low Bleed (LB)/Poly Cont.
I102011LB (Barrier Gray Underlay)

100% Polyester

Curing temperature and deposit thickness will play a big role in whether a printer is successful or not on these substrates. The lower the temperature the substrate is cured at, the less likely dye migration will take place. The suggested method to print this type of substrate is as follows: no more than a 160 mesh screen for the Barrier Gray and the top coat, medium to hard squeegee, flood screen with Barrier Gray, print one pass, one flash, move to top coat, print once, flash move to other colors and print wet-on-wet. Cure at 260°F/126°C for 1 ½ - 2 minutes.

Sublimated Garments

This is where the printing becomes more difficult and monitoring of the printing and curing parameters become important. The suggested method to print this type of substrate is as follows: no more than a 160 mesh screen Barrier Gray and the top coat, medium to hard squeegee, flood screen with Barrier Gray, print, flash, print, flash, flood screen again with Barrier Gray, print, flash, print, flash, move to top coat, flood screen with top coat, print, flash, print, flash, flood screen again with top coat, print, flash, print, flash and move to next colors and print wet-on-wet. Cure at 260°F/126°C for 1 ½ - 2 minutes.

Alternative Method

If you still find your garment is bleeding through with the above procedures, repeat the above procedures but use an 80 mesh screen instead.

Non-Phthalate Plastisol Inks (SportsWear Series)

Sportswear Poly White I-19-9060

Applications

- Direct printing
- Light to dark colored garments
- 100% Cotton garments
- Cotton/Polyester, Acrylic, Polyester, Polypropylene
- Spandex and stretchable substrates

Features

- Superb Bleed Resistance
- No Ghosting
- Great Stretchability
- Easy to print viscosity
- Great replacement for silicone inks
- Flat, smooth finish for multi-color printing

General Info:

Sportswear Poly White was formulated to have a slightly heavier body than our other whites to matt down fibers. It can be used as an underlay, as a highlight white and can be printed through mesh counts up to 230.

Bleed Resistance: Excellent

Opacity: High

Storage: 70° to 80°F. Due to the ability to cure at low temperatures, this is **extremely important**. Ink will become thicker over time but can be reduced to a printable viscosity.

Mesh: 61-230

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: Modifications are not recommended unless completely necessary. To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020) & puff use Puff Additive (I10-9903). ANY modification will effect Low Cure properties.

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 3-5 seconds, just enough for the surface to be tack free.

Squeegee Blade: 65 Duro.

Fusion/Curing: 260°F/127°C-325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (SportsWear Series)

Mimosa Poly LB White I-19-9075

Applications

- Direct printing
- Light, Medium & dark colored garments
- Cotton, Cotton/polyester and Polyester

Features

- Great body
 - Fast flashing
 - Great matting properties
 - High opacity for great coverage
 - High Bleed Resistance
-

General Info:

Mimosa White was formulated to be a bright white that lays flat and mattes down fibers to provide a smooth print. It can be used as an underlay, as a highlight white and can be printed through mesh counts up to 280.

Bleed Resistance: Great

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 110 up to 280

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907). Modifications could increase the gel point so testing is needed before production run.

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 2 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 260°F/127°C-325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate/PVC Plastisol Inks (Midori Series)

Radiant White HO LB I-10-9600

Applications

-Direct printing
-White or colored garments
-100% Cotton garments
-Cotton/Polyester, Acrylic,
Polyester, Polypropylene
Spandex and stretchable substrates

Features

-Superb Bleed Resistance
-Great Stretchability
-Easy to print viscosity
-Flat, smooth finish for multi-color printing
-Vibrant

General Info:

Radiant White is WM's newest and best bleed resistant white in the Midori series. This white has a vibrant sheen, prints flat and has great coverage. The body of the white is thicker than our other whites, but still prints nicely.

Bleed Resistance: Excellent

Opacity: High

Storage: 65° to 80°F. Keep out of direct sunlight

Mesh: 61-180

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: Modifications are not recommended unless completely necessary. To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020) & puff use Puff Additive (I10-9903). ANY modification will effect curing properties..

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 3-5 seconds, just enough for the surface to be tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 260°F/127°C-325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds..

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Titan Poly White I-10-9590

Applications

- Direct printing
- Medium to dark colored garments
- Cotton/polyester & 100% polyester

Features

- Great Coverage
 - Fast flashing
 - Super bright
 - Outstanding opacity for great coverage
 - Best bleed resistance of all the whites
-

General Info:

The Titan Poly White is our best bleed resistant white outside of our Sportswear Whites and LC Whites and has the best coverage in its' class. This is a must have white for all those troublesome garments that are prone to dye migration. While the body of this white is heavier than our other whites, it still prints easily, lays down flat and provides a soft feel for an LB white. Tested and proven this white is sure to work on the toughest garments.

Bleed Resistance: Extreme

Opacity: Extreme

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-180

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907). Additives will reduce bleed resistance.

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 2 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp or Round. Rounded is recommended.

Fusion/Curing: 260°F/127°C-325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Ultimate White I-10-9568

Applications

- Direct printing
- Light, Medium & dark colored garments
- Cotton/polyester & 100% polyester

Features

- Great body
 - Fast flashing
 - Super bright
 - High opacity for great coverage
 - Great bleed resistance
-

General Info:

Ultimate White is our top selling, high-opaque, low-bleed white. It was formulated to be extremely bright and provide the ultimate ease of printing through mesh counts up to 300, while at the same time providing unmatched bleed resistance and body characteristics that other manufactures have failed to duplicate.

Bleed Resistance: Great

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-300

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 2 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 260°F/127°C-325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Brite White I-10-9521

Applications

- Direct printing
- Light, Medium & dark colored garments
- Cotton/polyester blends

Features

- Great body
 - Fast flashing
 - Super bright
 - Good opacity for coverage
 - Good bleed resistance
-

General Info:

Brite White is our economical, general purpose white that provides good coverage and some bleed resistance on those pesky cotton/polyester blends. Even though this white is categorized as economical, its soft body still allows it to be printed as easily as our premium whites.

Bleed Resistance: Good

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-300

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 3 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 260°F/127°C-325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Avalanche White I10-9530

Applications

- Direct printing
- Light, Medium & dark colored garments
- Cotton/polyester blends

Features

- Smooth Body
 - Quick Flashing
 - Vibrant White
 - Good opacity for coverage
 - Good bleed resistance
-

General Info:

Avalanche White is an economical, general purpose white that provides good coverage and some bleed resistance on those pesky cotton/polyester blends. Even though this white is categorized as economical, its soft body still allows it to be printed as easily as our premium whites. This white is very similar to our Brite White with the exception the body is not as creamy and slightly thicker in viscosity.

Bleed Resistance: Good

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-260

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 3 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 260°F/127°C-325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Soft Cotton White I-10-9500

Applications

- Direct printing
- Light, Medium & dark colored garments
- Cotton

Features

- Creamy body
 - Fast flashing
 - Intensely bright
 - Excellent printability
 - Extreme soft hand
-

General Info:

Soft Cotton White is our premium cotton white, formulated for the printers who want the softest feeling white possible. When printed through high mesh counts this white provides a feel that could be mistaken for water-base. The combination of opacity, extreme soft feel and ease of printing makes this white stand above all other cotton whites in today's industry.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-305

Stencil: Any direct emulsion or capillary film

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907). Nylon Bonding agent is not recommended to be used with this product.

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 6 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Sun White Plus I-19-9100

Applications

- Direct printing
- Light, Medium & dark colored garments
- Cotton

Features

- Creamy body
 - Fast flashing
 - Bright
 - Excellent printability
 - Soft hand
-

General Info:

Sun White is our economy cotton white, formulated for the printers who are looking for a nice printing cotton white without the high price. The combination of coverage and ease of printing makes this an ideal cotton white for any shop.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-280

Stencil: Any direct emulsion or capillary film

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 6 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Just so Soft Black I66-2250

Applications

- Direct printing
- Light to medium colored garments
- Cotton, Cotton/polyester & 100% polyester

Features

- Creamy body
 - Extremely Soft hand
 - Excellent printability
 - No build-up
-

General Info:

Just so Soft Black is an extremely soft black that was formulated to mimic the feel of a water base print. This black is intense in color, easy to print and provides the softest feel of all our blacks. When printing onto garments with the potential to bleed, a low bleed underlay needs to be printed first. Also available in a base. See page 17, Bases and Additives, part number I10-1044.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 110-300. The higher the mesh count, the softer the feel.

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Should be printed last to minimize build-up.

Modifications: To reduce viscosity use Curable Reducer (I10-9906)

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle. The higher the squeegee pressure is, the softer the feel

Flashing: Not recommended.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed. When printing onto garments that have the potential to bleed, a low bleed underlay needs to be utilized.

Non-Phthalate Plastisol Inks (Midori Series)

Black Cream I10-2280

Applications

- Direct printing
- Light to dark colored garments
- Cotton, cotton blends & polyester

Features

- Creamy body
 - Soft hand
 - Excellent printability
 - No build-up
-

General Info:

Black Cream is a premium high performance black ink that is formulated with a super creamy texture that will not water down like most blacks. This black has the highest mat down properties and is more intense in color than any of our other blacks.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-300

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet for short runs but will build.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 8 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Matte Black I-10-2040

Applications

- Direct printing
- Light to dark colored garments
- Cotton, cotton blends & polyester

Features

- Smooth body
 - Great coverage
 - Clears well
 - No build-up
 - True matte finish
-

General Info:

Matte Black is a premium black with a true matte finish. Great for manuals or automatics. Holds good edge definition and is easy to print.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-300 (Ideal 160)

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 8 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Spec Black I10-2001

Applications

- Direct printing
- Light to dark colored garments
- Cotton, cotton blends & polyester

Features

- Smooth body
 - Great coverage
 - Clears well
 - No build-up
 - Soft feel
-

General Info:

Spec Black is our intermediate black that contains a soft creamy body, though not as creamy as our Black Cream. This black is very popular with manual and automatic printers.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-300 (Ideal 160)

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&SBase (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 8 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Majestic Black I-10-2195

Applications

- Direct printing
- Light to dark colored garments
- Cotton, cotton blends & polyester

Features

- Smooth body
 - Great coverage
 - Clears well
 - No build-up
-

General Info:

Majestic Black is our economical black that works great for manual or automatic printers. This particular black holds good edge definition while providing a soft hand. Though the body of this black is slightly stiffer than our higher quality blacks, it still prints just as easily.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-300 (Ideal 160)

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 8 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori System)

Printer's Ink Matching System (PIM)

Applications

- Black, colored or white garments
- For accurate color matching
- Cotton
- Cotton/Polyester, Acrylic & Polyester garments (with LB underlay)

Features

- Extremely opaque
 - PANTONE[®] approved
 - Low build-up
 - Intense color
-

General Info:

The W.M. Plastics "PIM" system consists of 18 colors, including fluorescents, that can be used to match PANTONE[®] colors or as direct print inks. All colors have great wet-on-wet print properties and contain a creamy body making them easy to print with. All colors are evaluated by our stringent QC process to ensure the colors are consistent from one batch to the next so your PANTONES[®] match every time.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-305

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020)), extend color use Soft-hand Base (I10-0111) & for dulling use Suede Additive (I10-9907).

Caution: Modification of the inks could increase the gel point.

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 9 seconds, just enough so the surface is tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Standard Colors:

(Refer to Standard Color-card for color reference)

I-65-3000	PIM Lemon Yellow	I-65-7000	PIM Orange
I-65-4000	PIM Green (YS)	I-65-9000	PIM White
I-65-5001	PIM Marine	I-65-8001	PIM Fls Pink
I-65-6001	PIM Red	I-65-8002	PIM Fls Magenta
I-65-6000	PIM Scarlet	I-65-8003	PIM Fls Yellow
I-65-3001	PIM Gold	I-65-8004	PIM Fls Purple
I-65-5000	PIM Blue (GS)	I-65-8005	PIM Fls Blue
I-65-5500	PIM Violet	I-65-8006	PIM Fls Orange
I-65-2000	PIM Black	I-65-6002	PIM Magenta

Non-Phthalate Plastisol Inks (Midori Series)

Puff Base I10-9950

Applications

- Light to dark colored garments
- Cotton
- Poly with underlay
- Blends with underlay

Features

- Provides a raise surface for special effects
 - Matte finish
 - Excellent printability
-

General Info:

Puff Base was designed to provide a raised texture effect. Can be used with a Pigment Concentrate (PC) system or printed with an overcoat color to achieve desired effect.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 60-110.

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

PC: Max PC loading 25%. Always test for curing prior to production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906)

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: Not recommended.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Hotsplit/Transfer Additive I10-9908

Applications

-Cotton, poly/blends
-Transforms a regular ink into a transfer ink

Features

-Provides a soft hand
-Creamy body for ease of mixing

General Info:

Hotsplit/Transfer additive was designed to allow a printer to use their current ink inventory as a transfer ink and make as needed.

Bleed Resistance: None

Opacity: None

Storage: Ideally 65° to 80°F. Keep out of direct sunlight. Printed transfer can last up to a year.

Mesh: 86 a minimum of 2.1 mils is required for a good transfer

Stencil: Any direct emulsion or capillary film.

Image: Mirrored.

Printing Sequence: Reversed.

Wet on Wet Printing: Not recommended.

PC: N/A.

Use: 10-15% by weight. Cross linking/bonding continues after the substrate has passed through the oven. Full bonding to the substrate's surface takes up to 72 hours. Do not scratch test immediately after printing.

Modifications: Transfer powder. Transfer powder is placed on the backside of the print to promote adhesion.

Squeegee Hardness & Angle: Does not impact squeegee hardness & angle.

Flashing: 700°F for 9 seconds, just enough so the surface is tack free. Needs to be done before each color.

Squeegee Blade: Does not impact squeegee blade to use.

Fusion/Curing: The ink should only be slightly gelled by heating the ink up to 180°-250°F in the oven. The final curing process is done with the heat transfer press at 350°-400°F for 5-10 seconds. Remove carrier paper immediately.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

HO Perfect Print Base I12-1002

Applications

- Light to dark colored garments
- Cotton
- Poly with underlay
- Blends with underlay

Features

- Tack Free
 - Super Creamy
 - Soft Hand
 - Vibrant Colors
 - Prints Flat
-

General Info:

HO Perfect Print Base is used for mixing colors from Pigment Concentrate (PC). Designed for high productivity and wet-on-wet printing.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 60-305.

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production. Resists build-up.

PC: Max PC loading 28%. Always test for curing prior to production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), extend color, use Soft-hand Base (I10-0111).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 3-5 seconds, just enough for the surface to be tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Suede Base I10-9958

Applications

- Light to dark colored garments
- Cotton
- Poly with underlay
- Blends with underlay

Features

- Provides a raised surface for special effects
 - Matte finish
 - Excellent printability
 - Smooth velvet surface
-

General Info:

Suede Base was designed to provide a raised, smooth velvet texture effect. Can be used with a PC system or printed with an overcoat color to achieve desired effect.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 60-230 Ideally 160.

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

PC: Max PC loading 20%. Always test for curing prior to production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906)

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 9 seconds, just enough for the surface to be tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Clear Gloss Gel I10-9910

Applications

- Enhance designs with a high gloss, wet look
- Can be tinted with Pigment Concentrates (PC)
- Glitter base

Features

- Creamy viscosity
 - Great for accenting artwork
 - Encapsulates printed area
 - Improves wash fastness
 - Improve durability
-

General Info:

Formulated as a clear overcoat gel to be printed over designs to provide a wet, glossy look as well as a glitter base.

Bleed Resistance: None

Opacity: None

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 83-230.

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Tinting with PC: Max PC loading 5%. Always test for curing prior to production.

Modifications: Not recommended

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: Not recommended.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

G&S Base I10-1020

Applications

- Light colored garments
- Cotton
- Glitter base
- Foil adhesive
- Stretch Additive

Features

- Clear
 - Easy to mix
 - Easy to print
-

General Info:

G&S base is a multi-use base that can be used as a stretch additive, glitter base, foil adhesive, underlay for stretch, and can be used with a Pigment Concentrate (PC) system.

Bleed Resistance: None

Opacity: Low

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 40-230.

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

PC: Max PC loading 15%. Always test for curing prior to production.

Used as a foil adhesive: Add 40-50% to colored, HO ink. Print, Flash, Print as a minimum using a mesh of 110-180. Press foil onto screenprinted surface at 325°F/160°C for 10 secs.

Used as a stretch additive: Up to 50% by weight to achieve desired stretch.

Modifications: Not recommended

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 9 seconds, just enough for the surface to be tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Just Soft Base 110-1044

Applications

- Light to medium colored garments
- Cotton

Features

- Creamy body
 - Extremely Soft hand
 - Excellent printability
 - No build-up
-

General Info:

Just So Soft Base is an extremely soft base that was formulated to be mixed with “ready-to-use” inks or PCs to reduce build-up and to achieve a water-base feel with a plastisol ink.

Bleed Resistance: None

Opacity: Low

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 110-300. The higher the mesh count, the softer the feel.

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

How much to add to “ready-to-use” Inks: Up to 70%. For best results use AP inks.

Mixing PC: Up to 25% PC by weight can be added to base.

Modifications: N/A

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle. The higher the squeegee pressure is, the softer the feel.

Flashing: Not recommended.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Soft Hand No Build Base I10-0111

Applications

- Cotton, Poly/blends
- Softens the hand
- Can extend a color
- Improve printing characteristics of an ink

Features

- Tack Free
 - Reduces tack in ink
 - Soft Hand
 - Clear
 - Curable by itself
-

General Info:

Soft Hand No Build base is a based designed to remove tack from ink, soften the final print, and used to extend inks.

Bleed Resistance: None

Opacity: None

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 60-280

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Improves wet-on-wet printability of colors.

PC: Max PC loading 15%. Always test for curing prior to production.

Modifications: Curable Reducer (I10-9906) to reduce viscosity

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 3-5 seconds, just enough for the surface to be tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Curable Reducer I10-9906

Applications

-Reduce viscosity of ink to make printing easier

Features

-Thin to ease mixing
-Curable by itself

General Info:

Curable Reducer was designed to reduce the viscosity of an ink to make an ink easier to print. Curable reducer is curable by itself so you can add as much as you need without the worry of your ink not curing.

Bleed Resistance: None

Opacity: None

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: N/A

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Improves wet-on-wet printability of colors.

PC: N/A.

Reducing Viscosity: Up to 15% by weight but can go higher if needed. 5% by weight will lower the viscosity of most inks by 25%. Addition of curable to Poly inks could reduce bleed resistance.

Modifications: N/A

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: Does not impact flash times.

Squeegee Blade: Sharp.

Fusion/Curing: Does not impact curing time of traditional inks that cure at 270°F degrees. Not recommended to be used in low cure inks.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Reducer #2 I109930

Applications

-Reduces much faster at less loadings

Features

-Thin to ease mixing
-Breaks ink down quickly

General Info:

Reducer #2 reduces the viscosity of an ink to make an ink easier to print. Reducer #2 breaks down the thickest of inks with ease at lower loadings than most other reducer. This reducer does NOT cure like our curable reducer. Additions should be done cautiously to not exceed the maximum level.

Bleed Resistance: None

Opacity: None

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: N/A

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Improves wet-on-wet printability of colors.

PC: N/A.

Reducing Viscosity: Up to 10% by weight. If 10% is exceeded make sure the ink will still cure before printing. Addition to Poly inks could reduce bleed resistance.

Modifications: N/A

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: Does not impact flash times.

Squeegee Blade: Sharp.

Fusion/Curing: Does not cure. Not recommended to be used in low cure inks.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Long Life Bonding Agent I79-0300

Applications

-Catalyst to bond to nylon and other tightly woven fabrics

Features

-Pot life much longer than other catalysts
-Easy to mix in
-Leftover ink can be used on any fabric

General Info:

Long Life Bonding Agent was formulated to have a longer pot life (compared to other catalysts) after mixing it into an ink. An ink mixed with Long Life can last up to 6 weeks, while most other catalysts reduce the pot life of an ink to 6 hours.

Bleed Resistance: None

Opacity: None

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: N/A

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Does not impact wet-on-wet printing.

PC: N/A.

Use: 10-15% by weight. Cross linking/bonding continues after the substrate has passed through the oven. Full bonding to the substrate's surface takes up to 72 hours. Do not scratch test immediately after printing.

Modifications: N/A

Squeegee Hardness & Angle: Does not impact squeegee hardness & angle.

Flashing: Does not impact flash times.

Squeegee Blade: Does not impact squeegee blade to use.

Fusion/Curing: Helps reduce the cure temperature of inks so they can be printed on heat sensitive substrates. Reduce the temperature of your dryer to within the range your substrate will accept and test for curing and adhesion.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Suede Additive/Dulling Paste I10-9907

Applications

- Light to dark colored garments
- Cotton
- Poly with underlay
- Blends with underlay

Features

- Provides a raise surface for special effects
 - Can be used to Matte the finish of an ink
 - Smooth velvet surface
-

General Info:

Suede additive/Dulling paste was designed to allow a printer to add to an ink to provide a raised, velvety textured effect or to dull the surface of an ink.

Bleed Resistance: None

Opacity: Good

Storage: Ideally 65° to 80°F. Keep out of direct sunlight. Printed transfer can last up to a year.

Mesh: 86-220

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Not recommended.

PC: N/A.

Use: To use as a suede additive use up to 10% by weight. To use as a dulling additive use up to 5% by weight.

Modifications: N/A

Squeegee Hardness & Angle: Does not impact squeegee hardness & angle.

Flashing: 700°F for 9 seconds, just enough so the surface is tack free. Needs to be done before each color.

Squeegee Blade: Does not impact squeegee blade to use.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Puff Additive I10-9903

Applications

- Light to dark colored garments
- Cotton
- Poly with underlay
- Blends with underlay

Features

- Provides a raise surface for special effects
 - Surface is a bit rougher compared to suede effect
-

General Info:

Puff additive was designed to allow a printer to add to an ink to provide a raised, puff effect. Surface is slightly rougher compared to the suede effect

Bleed Resistance: None

Opacity: Great

Storage: Ideally 65° to 80°F. Keep out of direct sunlight. Printed transfer can last up to a year.

Mesh: 60-110

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Not recommended.

PC: N/A.

Use: 10-15% by weight.

Modifications: N/A

Squeegee Hardness & Angle: Does not impact squeegee hardness & angle.

Flashing: 700°F for 9 seconds, just enough so the surface is tack free. Needs to be done before each color.

Squeegee Blade: Does not impact squeegee blade to use.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

Lustre, Glitter & Metallic Inks

Applications

- Black, colored or white garments
- Unique effects
- Cotton
- Cotton/Polyester, Acrylic & Polyester garments (with LB underlay)

Features

- Easy to print
 - Bright and outstanding effects
 - Great coverage
-

General Info:

These inks are designed to stand out on garments by providing a unique appearance that will catch anyone's eye. Available in an array of colors and contains great opacity to cover the dark garments.

Bleed Resistance: None

Opacity: High

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: Lustres 86, Glitters 40, Crystalina 40 & Metallics 110

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), extend color use Soft-hand Base (I10-0111) & for dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds. Because metallics and lustres reflect it may be necessary to increase temperature and dwell time.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Standard Colors:

I-10-1116 Lustre Silver
I-10-1115 Lustre Gold
I-10-1113 Lustre Copper
I-10-1107 Lustre Green
I-10-1105 Lustre Purple

I-10-1102 Glitter Gold
I-10-1103 Glitter Silver
I-10-1104 Glitter Crystalina
I-10-1100 Metallic (Handwash) Silver
I-10-1101 Metallic Gold

Note: I-10-1101 Metallic Gold will tarnish in the container over time, therefore it should be used immediately and ordered only as needed.

Non-Phthalate Plastisol Inks (Midori Series)

Glow-in-the Dark

Applications

- Direct printing
- White garments
- Cotton
- Cotton/Polyester, Acrylic & Polyester garments (with LB underlay)

Features

- Ready to use
 - Extremely bright
 - Long lasting
 - Glowes a brilliant green
-

General Info:

Great for novelty items. Our glow-in-the-dark ink has an extremely high pigment loading, compared to other manufactures, therefore providing a brighter and more long lasting glow. I-10-9965 is ready to print, but WM does offer the powder and base for sale so the printer can mix his own glow ink at any strength he wishes.

Bleed Resistance: None

Opacity: Medium

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86-110

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: Reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020), puff use Puff Additive (I10-9903), extend color use Soft-hand Base (I10-0111) & for suede puff or dulling use Suede Additive (I10-9907).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 9 seconds, just enough for the surface to be tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Non-Phthalate Plastisol Inks (Midori Series)

4-Color Process Inks

Applications

- Direct printing
- White garments
- Cotton
- Cotton/Polyester, Acrylic & Polyester garments (with LB underlay)

Features

- Ready to use
 - Extra creamy body
 - Brilliant colors
-

General Info:

4-Color Process inks were designed to allow the printer to achieve a multitude of colors within the color spectrum by using a minimal number of inks.

Bleed Resistance: None

Opacity: None

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 280 and up

Stencil: Any direct emulsion or capillary film.

Artwork: Separations are critical to the success of printing these inks.

Modifications: To reduce viscosity use Curable Reducer (I10-9906) & to extend color use Soft-hand Base (I10-0111).

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: Not recommended.

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Standard Colors:

I-10-8903	4/C Yellow	I-10-8906	4/C Magenta
I-10-8902	4/C Cyan	I-10-8915	4/C Black

Non-Phthalate Plastisol Inks (Midori Series)

4-Color Process Inks Cont.

Recommended Procedures for Process Colors

- 1: Set machine pressure just enough to achieve good coverage. Once set do not adjust pressure or it will alter the final shades
- 2: Print each of the four colors separately, preferably on the same type of fabric to be used for production. If each color appears strong and vibrant, proceed to the next step, if not, repeat step one.
- 3: Print Yellow and Magenta together and evaluate the resulting orange tones against the color key provided by the separator. If the oranges are too yellow add I-10-0111 to the yellow to weaken the color strength. If the orange is too red, add the I-10-0111 to the magenta to weaken the color strength.
- 4: Print Magenta and Cyan together and evaluate the purple tone to the color key. If the purple is too blue add I-10-0111 to the Cyan. If the purple is too red add I-10-0111 to the Magenta. If the Magenta is adjusted in this step you must repeat step one.
5. Now print all colors together and evaluate the Black. If the Black is too strong add I-10-0111
6. Now print all colors, lightest to darkest, together and compare to the color key.
7. Once the color key has been matched production may begin. Keep the setup as stable as possible. Increasing or decreasing squeegee pressure or the number of strokes will change a color's value and alter the overall print.

Ink Values for Adobe Photoshope

Color	Y	x	y
Cyan	18.094	0.1671	0.2625
Magenta	13.51	0.5122	0.3106
Yellow	74.706	0.4582	0.492
Cyan Yellow	16.919	0.2971	0.5016
Magenta Yellow	20.862	0.4828	0.3971
Cyan Magenta	6.344	0.2627	0.2531
Cyan Magenta Yellow	11.364	0.3323	0.4335
Black	4.819	0.3323	0.4335
White	93.102	0.3161	0.3346

Non-Phthalate/PVC Plastisol Inks (Midori Series)

Direct Print Reflective Silver

Applications

- E.M.S uniforms
- Novelty garments
- 100% cotton

Features

- Excellent print & wash properties
 - Ready to print
 - Available as a base, Silver or Gold
-

General Info:

Designed as a ready-to-use ink that reflects with most light sources. This series has a very smooth body allowing it to easily release from the screen unlike most other reflective inks. This product is great for construction crews, fire departments or any niche market that needs a print that reflects when exposed to light

Bleed Resistance: None

Opacity: Low

Storage: Ideally 65° to 80°F. Keep out of direct sunlight.

Mesh: 86

Stencil: Any direct emulsion or capillary film

Wet on Wet Printing: Should be printed wet-on-wet.

Modifications: To reduce viscosity use Curable Reducer (I10-9906)

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: DO NOT FLASH

Squeegee Blade: Sharp.

Fusion/Curing: 270°F/132°C to 325°F/163°C for 1 to 1 ½ minutes. Oven temperature can be increased and dwell time decreased. For heat presses use 390°F/195°C for 8 seconds.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Standard Colors:

I-62-1010 Reflective Silver

Non-Phthalate/PVC Plastisol Inks (LC Inks)

Low Cure Inks

General Info:

The LC Series is WM's most versatile series on the market, enabling printers to print on the most difficult substrates. Not only does this system hold up to the worst bleeders, but at the lower cure temps it could save a shop a ton of money in reduced energy costs.

Applications

-Direct printing
-White or colored garments
-100% Cotton garments
-Cotton/Polyester, Acrylic,
Polyester, Polypropylene
Spandex and stretchable substrates

Features

-Superb Bleed Resistance
-No Ghosting
-Great Stretchability
-Easy to print viscosity
-Great replacement for silicone inks
-Flat, smooth finish for multi-color printing

Bleed Resistance: Excellent

Opacity: High

Storage: 70° to 80°F. Due to the ability to cure at low temperatures, this is **extremely important**. Ink will become thicker over time but can be reduced to a printable viscosity.

Mesh: 61-230

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: Modifications are not recommended unless completely necessary. To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020) & puff use Puff Additive (I10-9903). ANY modification will effect Low Cure properties.

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 3-5 seconds, just enough for the surface to be tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 230°F/121° C for 1 ½ - 2½ minutes. 325°F/163° C for 1 to 1 ½ minutes.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Printing Tips

As today's garments become more difficult to print on it becomes increasingly important that printing and curing parameters be monitored to ensure the most success on these substrates. Each type of substrate will have different printing requirements. Below is a quick outline of suggestions to yield a higher success rate for each type.

Please note these are tips for success and in no way a guarantee against bleeding. As the manufacture of the plastisol, we can't stress enough to test before running production

Cotton & Poly/Cotton Blends

Cotton and Poly Cotton blends should be the easiest of the substrates to print on. Curing temperature remains a small factor even on these easier to print garments. Suggested temperature to cure these type of garments is 270°F/132°C to 300°F/149°C 1 to 1½ minutes. The lower temperatures will help reduce the chances of bleeding on the blends, possible ghosting and scorching on the 100% cotton.

100% Polyester

This is where the printing becomes more difficult and monitoring of the printing and curing parameters become important. Curing temperature and deposit thickness will play a big role in whether a printer is successful or not on these substrates. The lower the temperature the substrate is cured at, the less likely dye migration will take place. Suggested temperature to cure these type of garments is, 250°F/121°C to 270°F/132°C 1½ to 2 minutes. In addition to the lower temperature, we recommend our Brute White be printed as an underlay with no more than a 110 mesh.

100% Nylon and Other Heat Sensitive Substrates

These type of substrates can be damaged when exposed to high temperatures. Suggested temperature to cure these type of garments is 250°F/121°C to 270°F/132°C 1½ to 2 minutes. In extreme cases, a temperature of 230°F/110°C to 240°F/116°C for 1½-2½ minutes can be used to cure the ink along with the use of our Long Life Nylon Bonding agent.

Stretchable Substrates

Make sure to print a thicker deposit on these substrates. Recommended mesh count would be no more than a 110 with a print-flash-print technique. Cure at temperatures between 270°F/132°C 1½ to 2 minutes.

Prior to production

The above tips are to help the printer be successful against dye migration and other factors when screen printing, not a guarantee. It is still up to the printer to test prior to running production due to the variables involved in manufacturing shirts/substrates. If curing at lower temperatures, make sure to check the cured ink prior to production run to ensure it meets the requirements of the customer. If the ink is not curing, increase dwell time as needed. Inks may thicken in colder temperatures but will return to normal printing viscosity when stirred.

Standard Colors:

(Refer to Standard Color-card for color reference)

I-30-3014	LC Primrose	I-30-3040	LC Vegas Gold
I-30-3002	LC Lemon	I-30-2250	LC PMS Cool Gray 4C
I-30-3006	LC Yellow Gold	I-30-5332	LC Lt Navy
I-30-3001	LC Lt. Gold	I-30-5001	LC Royal Blue
I-30-3372	LC Gold	I-30-5666	LC Russ Purple
I-30-9592	LC Gray Underlay	I-30-6247-	LC Cardinal
I-30-6438	LC Scarlet	I-30-6251	LC Maroon
I-30-6056	LC Brite Red	I-30-2050	LC Lt. Brown
I-30-5048	LC Sky Blue	I-30-7109	LC Brite Orange
I-30-4053	LC Kelly Green	I-30-9890	LC Brute White
I-30-5040	LC Turquoise	I-30-2000	LC Black

Non-Phthalate/PVC Plastisol Inks (LC PIM Inks)

Low Cure Matching System

General Info:

The LC Series is WM's most versatile series on the market, enabling printers to print on the most difficult substrates. Not only does this system hold up to the worst bleeders, but at the lower cure temps it could save a shop a ton of money in reduced energy costs.

Applications

-Direct printing
-White or colored garments
-100% Cotton garments
-Cotton/Polyester, Acrylic,
Polyester, Polypropylene
Spandex and stretchable substrates

Features

-Superb Bleed Resistance
-No Ghosting
-Great Stretchability
-Easy to print viscosity
-Great replacement for silicone inks
-Flat, smooth finish for multi-color printing

Bleed Resistance: Excellent

Opacity: High

Storage: Ideally 65° to 90°F. Keep out of direct sunlight.

Mesh: 61-230

Stencil: Any direct emulsion or capillary film.

Wet on Wet Printing: Can be printed wet-on-wet to increase production.

Modifications: Modifications are not recommended unless completely necessary. To reduce viscosity use Curable Reducer (I10-9906), improve stretch use G&S Base (I10-1020) & puff use Puff Additive (I10-9903). ANY modification will effect Low Cure properties.

Squeegee Hardness & Angle: Medium to hard at a 45 degree angle.

Flashing: 700°F for 3-5 seconds, just enough for the surface to be tack free.

Squeegee Blade: Sharp.

Fusion/Curing: 230°F/121° C for 1 ½ - 2½ minutes. 325°F/163° C for 1 to 1 ½ minutes.

Wash-up: Any plastisol cleaner.

Special Notes: PVC inks are thermoplastic compounds that require heat to fuse or cure. If ink rubs off on a white cloth or cracks, temperature and/or dwell time should be increased. Do not dry clean and always test on fabric to be printed.

Standard Colors:

(Refer to Standard Color-card for color reference)

I-30-3100	LC PIM Lemon Yellow	I-30-7100	LC PIM Orange
I-30-4100	LC PIM Green (YS)	I-30-9100	LC PIM White
I-30-5200	LC PIM Marine	I-30-8100	LC PIM Fls Pink
I-30-6200	LC PIM Red	I-30-6300	LC PIM Magenta
I-30-6100	LC PIM Scarlet	I-30-8200	LC PIM Fls Magenta
I-30-3200	LC PIM Gold	I-30-8300	LC PIM Fls Yellow
I-30-5100	LC PIM Blue (G/S)	I-30-8400	LC PIM Fls Purple
I-30-5300	LC PIM Violet	I-30-8500	LC PIM Fls Blue
I-30-2100	LC PIM Black	I-30-8600	LC PIM Fls Orange Red
I-30-1100	LC Clear Base		

AP STANDARD COLORS

AP(All Purpose)-Light Color 100% Cotton Garments



JB-3125-AP Dallas Gold



JB-3135-AP Primrose



JB-3122-AP Lemon



JB-3209-AP Yellow Gold



JB-3303-AP Gold



JB-7109-AP Brite Orange



JB-6056-AP Brite Red



JR-6420-AP Scarlet



JB-6247-AP Cardinal



JB-6251-AP Maroon



JB-5525-AP Violet



JW-5666-AP Russ Purple



JB-5011-AP Navy



JR-5332-AP Lt. Navy



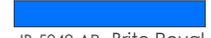
JN-5001-AP Royal



JB-5013-AP Marine Blue



JW-5273-AP Lt. Royal



JB-5042-AP Brite Royal



JB-5104-AP Lt. Reflex Blue



JB-5048-AP Sky Blue



JB-5120-AP Lt. Blue



JB-5040-AP Turquoise



JB-4030-AP Dallas Green



JB-4053-AP Kelly Green



JB-4328-AP Forrest Green

HO STANDARD COLORS

HO(High Opacity)-Dark Color 100% Cotton Garments



JB-7109-HO Brite Orange



JB-6056-HO Brite Red



JW-6008-HO Drake Red



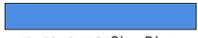
JW-6501-HO Panther Pink



JB-5013-HO Marine Blue



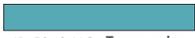
JB-5042-HO Brite Royal



JB-5048-HO Sky Blue



JB-5120-HO Lt. Blue



JB-5040-HO Turquoise



JB-2250-HO PMS Cool
Gray 4C



JB-2060-HO Nu Brown



JB-2065-HO Dk. Brown



JB-2050-HO Lt. Brown



JB-4000-HO Mile High Green



JB-4003-HO Spring Green



JB-4030-HO Dallas Green



JB-4053-HO Kelly Green

4-Color Process



I-10-8902 4/C Cyan Blue(GS)



I-10-8903 4/C Yellow



I-10-8905 4/C Blue(RS)



I-10-8906 4/C Magenta



I-10-8915 4/C Black

***NOTE: Due to the limitations of printing inks, the swatches shown in this brochure are only representative.**

LB STANDARD COLORS

LB(Low Bleed)-Polyesters and Blends



I-10-3014-LB Poly Primrose



I-10-3002-LB Poly Lemon



I-10-3006-LB Poly Yellow Gold



I-10-3001-LB Poly Lt. Gold



I-10-3372-LB Poly Gold



JW-3040-LB Poly Vegas Gold



JB-7109-LB Poly Brite Orange



JB-6056-LB Poly Brite Red



I-11-6438-LB Poly Scarlet



JB-6247-LB Poly Cardinal



JB-6251-LB Poly Maroon



JW-5666-LB Poly Russ Purple



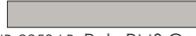
JR-5332-LB Poly Lt. Navy



JN-5001-LB Poly Royal Blue



JB-5048-LB Poly Sky Blue



JB-2250-LB Poly PMS Cool
Gray 4C



JB-2050-LB Poly Lt. Brown



JB-4053-LB Poly Kelly Green



I-10-9592-LB Poly Gray Underlay

LC STANDARD COLORS

LC(Low Cure)-Polyesters and Blends



I-30-3014 LC Primrose



I-30-3002 LC Lemon



I-30-3006 LC Yellow Gold



I-30-3001 LC Lt. Gold



I-30-3372 LC Gold



I-30-3040 LC Vegas Gold



I-30-7109 LC Brite Orange



I-30-6056 LC Brite Red



I-30-6438 LC Scarlet



I-30-6247 LC Cardinal



I-30-6251 LC Maroon



I-30-5666 LC Russ Purple



I-30-5332 LC Lt. Navy



I-30-5001 LC Royal Blue



I-30-5048 LC Sky Blue



I-30-2250 LC PMS Cool
Gray 4C



I-30-2050 LC Lt. Brown



I-30-4053 LC Kelly Green



I-30-5040 LC Turquoise



I-30-9592 LC Gray Underlay



I-30-9890 LC Brute White



I-30-2000 LC Black

Fluorescent COLORS

**Note-For best results use an underlay for dark garments



I-11-8520 HO FLS Lemon



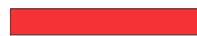
I-11-8535 HO FLS Orange



I-11-8515 HO FLS Magenta



I-11-8534 HO FLS Pink



I-11-8530 HO FLS Red



I-11-8532 HO FLS Green



I-11-8531 HO FLS Blue



I-11-8533 HO FLS Violet

Flex Matches

Popular colors from other manufacturers.
HO(High Opacity)-Dark Color 100% Cotton Garments



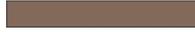
JW-2000-HO Russell Flex Gray



JW-2222-HO Dark Flex Gray



JW-3000-HO Lemon Flex Yellow



JW-3500-HO Spice Flex Brown



JW-4340-HO Dallas Flex Green



JW-4345-HO Kelly Flex Green



JW-5000-HO Contact Flex Blue



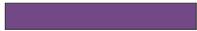
JW-5001-HO Winter Flex Blue



JW-5002-HO Light Flex Royal



JW-5250-HO Bears Flex Navy



JW-5665-HO Russell Flex Purple



JW-6000-HO Flex Scarlet



JW-6001-HO National Flex Red



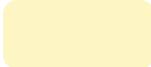
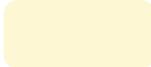
JW-6480-HO Brandywine Flex Red



JW-7000-HO Dolphin Flex Orange

PIM COLOR CARD

Printers Ink Matching System

				
Pim Yellow 100% Pim White 0%	Pim Yellow 90% Pim White 10%	Pim Yellow 50% Pim White 50%	Pim Yellow 10% Pim White 90%	Pim Yellow 1% Pim White 99%
				
Pim Green 100% Pim White 0%	Pim Green 90% Pim White 10%	Pim Green 50% Pim White 50%	Pim Green 10% Pim White 90%	Pim Green 1% Pim White 99%
				
Pim Marine 100% Pim White 0%	Pim Marine 90% Pim White 10%	Pim Marine 50% Pim White 50%	Pim Marine 10% Pim White 90%	Pim Marine 1% Pim White 99%
				
Pim Red 100% Pim White 0%	Pim Red 90% Pim White 10%	Pim Red 50% Pim White 50%	Pim Red 10% Pim White 90%	Pim Red 1% Pim White 99%
				
Pim Scarlet 100% Pim White 0%	Pim Scarlet 90% Pim White 10%	Pim Scarlet 50% Pim White 50%	Pim Scarlet 10% Pim White 90%	Pim Scarlet 1% Pim White 99%
				
Pim Magenta 100% Pim White 0%	Pim Magenta 90% Pim White 10%	Pim Magenta 50% Pim White 50%	Pim Magenta 10% Pim White 90%	Pim Magenta 1% Pim White 99%
				
Pim Gold 100% Pim White 0%	Pim Gold 90% Pim White 10%	Pim Gold 50% Pim White 50%	Pim Gold 10% Pim White 90%	Pim Gold 1% Pim White 99%
				
Pim Orange 100% Pim White 0%	Pim Orange 90% Pim White 10%	Pim Orange 50% Pim White 50%	Pim Orange 10% Pim White 90%	Pim Orange 1% Pim White 99%
				
Pim Blue 100% Pim White 0%	Pim Blue 90% Pim White 10%	Pim Blue 50% Pim White 50%	Pim Blue 10% Pim White 90%	Pim Blue 1% Pim White 99%
				
Pim Violet 100% Pim White 0%	Pim Violet 90% Pim White 10%	Pim Violet 50% Pim White 50%	Pim Violet 10% Pim White 90%	Pim Violet 1% Pim White 99%
				
Pim Black 100% Pim White 0%	Pim Black 90% Pim White 10%	Pim Black 50% Pim White 50%	Pim Black 10% Pim White 90%	Pim Black 1% Pim White 99%

Certificate of Compliance

This is to certify that W.M. Plastics screen inks are in compliance with Consumer Products Safety Act, Title 16, Part 1303 and Federal Hazardous Substance Act Part 16 regarding banning of lead content and certain phthalate plasticizers.

Embodied in these regulations is The Product Consumer Safety Act of 2008 (HR4040) regarding further stringent requirements regarding lead reduction in children's toys, and child care products. The federal regulations apply to toys and/or children care products that are placed in direct contact of the mouth. W.M. Plastics screen inks comply with the spirit of these regulations and are intended to be used in textile applications.

W.M. Plastics screen inks were manufactured in the United States and does not contain:

- di-2-ethylhexyl phthalate (DEHP), CAS Registry number 117-81-7
- di-butyl phthalate (DBP), CAS registry number 84-74-2
- butyl benzyl phthalate (BBP) CAS registry number 85-68-7
- di-iso decyl phthalate (DIDP) CAS registry number 68-515-49-1
- di-iso nonyl phthalate (DINP) CAS number 28553-12-0
- di-n-octyl phthalate (DnOP) CAS number 68-515-45-7

None of the screen printing inks contain nor were manufactured with class I or class II ozone depleting substances.



**BUREAU
VERITAS**

CONSUMER PRODUCTS SERVICES DIVISION

WM PLASTICS, INC

Technical Report: (5123)285-0041REVISION
Date Received: OCTOBER 12, 2023

NOVEMBER 27, 2023
Page 1 of 4

JOSEPH BROWN
WM PLASTICS, INC
5301 TERMINAL STREET
CHARLOTTE NC, 28208
UNITED STATES

Sample Description:	WET SAMPLES OF INK	PO No.:	N/A
Manufacturer:	WM PLASTICS	Style:	N/A
Buyer:	N/A	Country of Destination:	N/A
Country of Origin:	UNITED STATES	Protocol No.:	N/A
SKU No.:	N/A	UPC Code:	N/A
Item #:	N/A	Lot #:	N/A
Previous Report No.:	N/A		

EXECUTIVE SUMMARY:

The following samples MEET the below requirements:

- The total lead content of 100 ppm requirements by composite testing in substrate materials (Consumer Products Safety Improvement Act (CPSIA) of 2008).
- **The BBP, DBP, DEHP, DnHP, DIDP and DINP content requirements of the client's specifications.**
- **The total cadmium content of substrate materials requirements in client's specification (100ppm).**

NOTE: This technical report has been revised to add additional testing.

BVCPS Buffalo Contact Information for this Report:

Administrative Questions: Tammy Miller Phone: 716-505-3471 tammy.miller@bureauveritas.com

Technical Questions: Jennifer Sears Phone: 716-505-3426 jennifer.sears@bureauveritas.com

Bureau Veritas
Consumer Products Services, Inc.

Jennifer Sears
Product Chemist
Heavy Metals Department

/so

Bureau Veritas Consumer Products Services, Inc.
100 Northpointe Parkway
Buffalo, New York 14228
Telephone: (716) 505-3300 Fax: (716) 505-3301
website: www.bureauveritas.com/cps

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/cps> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



RESULTS:

TOTAL LEAD CONTENT IN SUBSTRATE BY COMPOSITE TESTING (100PPM) (Consumer Product Safety Improvement Act (CPSIA) of 2008)

Test Method: U.S. CPSC-CH-E1001-08.3:2012 or U.S. CPSC-CH-E1002-08.3:2012

Analyte	Lead	
Requirement: Maximum allowable limit:	100 mg/kg	

Analyte			Lead (Pb)	Conclusion	
Sample Description			Result (mg/kg)		
Color / Component	Location	Style			
(A)	Grey, White and Off White Ink	Inks	A-C	LT 10.0	Pass
(B)	Bright White and Yellow Inks	Inks	D-F	LT 10.0	Pass
(C)	Bright Yellow, Yellow and White Ink	Inks	G-I	LT 10.0	Pass

LT = Less Than

mg/kg = milligrams per kilogram (ppm = parts per million)

* = Average of duplicate analyses

CLIENT'S TOTAL CADMIUM CONTENT IN SUBSTRATE (100PPM)

Analyte	Cadmium	
Requirement: Maximum allowable limit:	100 mg/kg	

Analyte			Cadmium (Cd)	Conclusion	
Sample Description			Result (mg/kg)		
Color / Component	Location	Style			
(A)	Grey, White and Off White Ink	Inks	A-C	LT 10.0	Pass
(B)	Bright White and Yellow Inks	Inks	D-F	LT 10.0	Pass
(C)	Bright Yellow, Yellow and White Ink	Inks	G-I	LT 10.0	Pass

LT = Less Than

mg/kg = milligrams per kilogram (ppm=parts per million)

* = Average of duplicate analyses



RESULTS:

CLIENT'S BBP/DBP/DEHP/DnHP/DIDP/DINP PHTHALATES CONTENT REQUIREMENTS

Sample ID	Color / Component	Location	Style
A	Dark Gray Ink	Ink	A
B	Off-White Ink	Ink (I30-1000)	B
C	Off-White Ink	Ink (I12-1002)	C
D	White Ink	Ink (I10-9590)	D
E	White Ink	Ink (I10-9521)	E
F	Yellow Ink	Ink (I30-3100)	F
G	Dark Yellow Ink	Ink (I65-3001)	G
H	Yellow Ink	Ink (I65-3000)	H
I	White Ink	Ink (I19-9060)	I

Test Parameter	BBP	DBP	DEHP	DnHP	DIDP	DINP	Conclusion
Limit (%)	0.1	0.1	0.1	0.1	0.1	0.1	
Sample	Result (%)						
A	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	
B	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass
C	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass
D	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass
E	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass
F	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass
G	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass
H	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass
I	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.005	Pass

Detection Limit :

BBP = Butyl benzyl phthalate (0.005%)
DBP = Dibutyl phthalate (0.005%)
DEHP = Di(2-ethylhexyl) phthalate (0.005%)
DnHP = Di-n-hexyl phthalate (0.005%)
DIDP = Di-iso-decyl phthalate (0.005%)
DINP = Di-iso-nonyl phthalate (0.005%)

Results reported in percentage

LT = Less than
GT = Greater than
ND = None detected



WM PLASTICS, INC
Technical Report: **(5123)285-0041R**
November 27, 2023
Page 4 of 4

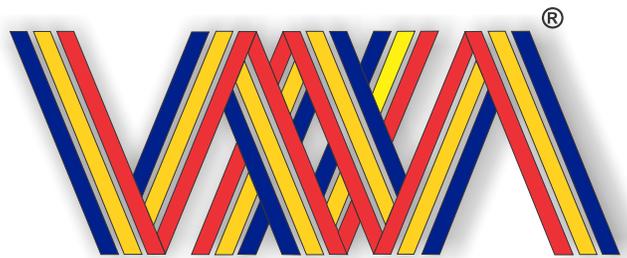
EXHIBIT # 1



Disclaimer: The certification and statement provided in this catalog is evidence that WM inks and the process in which the inks are manufactured have been thoroughly tested and are Phthalate-Free and are in compliance with the banning of lead when the product leaves the manufacturing facility; thus, WM Plastics, Inc. is not liable for any claim once the product has shipped. Please note, due to many variables involved in the printing process contamination is a possibility; therefore, it is up to the printer to certify their process and the final product and provide this certification to their customer.

Pages From this Point
Intentionally Left Blank

Pages From this Point
Intentionally Left Blank



W.M. PLASTICS

Servicing The Industry Since 1983