

# Bases, Pigments, Whites and Blacks

Soft Hand, Environmental Friendly, Opaque and Transparent



Ink Application Chart

Name	Extender Base	Clear 301 C	Mat 301 M	White 301 W	Stretch Clear 301	Stretch Mat 301	Stretch White 301	Neo Pigments	RC Spot Black	Jet Black Paste
Product Codes	WB0010	WS0462	WS0463	WS0465	WS0501	WS0511	WS0502		WB0312	WB0627
General Information	Economy high mesh clear mixing base used on white and light garments	High mesh clear mixing base used on white or light garments	High mesh semi-opaque mixing base that results in a matte finish	High mesh direct print and mixing white	Performance clear mixing base used on white or light garments	Performance semi-opaque mixing base that results in a matte finish	Performance white used for direct print and mixing white	13 Primary pigments and 7 Fluorescent pigments that are compatible with all Matsui bases	Premium high mesh direct print black	Economy high mesh direct print black
Color(s)	Transparent	Transparent	Milky	White	Transparent	Milky	White	Variety	Black	Black
<b>Substrates</b>										
Cotton	Excellent on white and lights	Excellent on white and lights	Excellent on white and lights	Excellent on all colors	Excellent on white and lights/on darks use Stretch White	Excellent on white and lights/on darks use Stretch White	Excellent on all colors	Base dependent system	Excellent	Excellent
Cotton/Polyester	Excellent on white and lights	Excellent on white and lights	Excellent on white and lights	Excellent on white and lights/on darks use Under Base Blocker	Excellent on white and lights/on darks use Under Base Blocker	Excellent on white and lights/on darks use Under Base Blocker	Excellent on white and lights/on darks use Under Base Blocker	Base dependent system	Excellent	Not recommended
100% Polyester	Not recommended	Not recommended	Not recommended	Not recommended	Excellent on white and lights/on darks use Under Base Blocker	Excellent on white and lights/on darks use Under Base Blocker	Excellent on white and lights/on darks use Under Base Blocker	Base dependent system	Not recommended	Not recommended
Athletic Nylon Mesh	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Excellent on white and lights/on darks use Stretch White	Excellent on white and lights/on darks use Stretch White	Excellent	Base dependent system	Not recommended	Not recommended
Athletic Polyester	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Excellent on white and lights/on darks use Under Base Blocker	Excellent on white and lights/on darks use Under Base Blocker	Excellent on white and lights/on darks use Under Base Blocker	Base dependent system	Not recommended	Not recommended
Tight Woven denier cloths	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Excellent w/Fixer F or N	Excellent w/Fixer F or N	Excellent w/Fixer F or N	Base dependent system	Not recommended	Not recommended
<b>Properties</b>										
Opacity	Poor	Poor	Good	Excellent	Poor	Good	Excellent	N/A	Excellent	Excellent
Bleed Resistance	None	None	None	None	None	None	None	N/A	N/A	N/A
Wet on wet	Excellent	Excellent	Excellent	N/A	Excellent	Excellent	N/A	N/A	Excellent	Excellent
Flash Cure	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Dry Cleaning/Ironing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes	Yes
<b>Application</b>										
Mesh	86-160 (34-63cm)	110-305 (43-120cm)	110-305 (43-120cm)	110-305 (43-120cm)	86-160 (34-63cm)	86-160 (34-63cm)	86-160 (34-63cm)	N/A	110-305 (43-120cm)	86-160 (34-63cm)
Stencil	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water/solvent resistant	Hardened direct water/solvent resistant	Hardened direct water/solvent resistant	N/A	Hardened direct water resistant	Hardened direct water resistant
Cure Temp	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C	N/A	320°F /160°C	320°F /160°C
Wash Up	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent
<b>Additives</b>										
Retarder MG/Printgen MG	1-5%	1-5%	1-5%	1-5%	1-5%	1-5%	1-5%	N/A	1-5%	1-5%
Fixer WF-N/Fixer N	1-5%	1-5%	1-5%	1-5%	1-5%	1-5%	1-5%	N/A	1-5%	1-5%
Softener MG/Softener XA-1	1-4%	1-4%	1-4%	1-4%	1-4%	1-4%	1-4%	N/A	1-4%	1-4%
Thickener B/Carrier B	0.25-1%	0.25-1%	0.25-1%	0.25-1%	0.25-1%	0.25-1%	0.25-1%	N/A	0.25-1%	0.25-1%

Always test inks prior to production to test their fitness for your particular application. Customer is responsible for proper application, suitability, and cure of all inks.

# Dyestone

Rotary Press, Screen Print, and Dye Stuff



Ink Application Chart

Dyestone is recommended to be printed on white and light fabric only  
Recommended dryer time is 3 to 5 minutes

Name	X Colors (pigments)	X Paste (Base)	Fixer XA	Fixer XA-C	Fixer XA-E	Fixer XA-N	Thickener XA-R	Thickener XS	Printgen XA-1	Abrasion XF
<b>Product Codes</b>		<b>WB1022</b>	<b>WB1009</b>	<b>WB1007</b>	<b>WB1002</b>	<b>WB1016</b>	<b>RM0195</b>	<b>WB1023</b>	<b>WB1011</b>	<b>WB1008</b>
General Information	14 Primary colors with excellent wash fastness	Instant printing base to mix with Dyestone X pigments	Cross-linking agent to increase bonding for higher pigment load	Cross-linking agent to increase dry crocking	Low temp cross-linking agent to increase wash fastness	High temp cross-linking agent to increase wash fastness	Helps raise viscosity	Must be mixed at 2% with water before blending with other components	Softening agent	Finishing agent to improve softness for wet crocking
Color(s)	Variety	Milky	Milky	Milky	Milky	Milky	Pale Yellow	Pale Yellow	Milky	Semi-transparent
<b>Properties</b>										
Opacity	Poor	Poor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wet on wet	Excellent	Excellent	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dry Cleaning/Ironing	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Application</b>										
Mesh	N/A	150-305 (59-120cm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Stencil	N/A	Hardened direct water resistant	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cure Temp	N/A	320°F /160°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wash Up	Water and mild soap or detergent	Water and mild soap or detergent	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recommended Use	N/A	N/A	10-15%	2-4%	2%	2%	1%	2%	2%	3%

Revised: 09/14

Page 2

# Discharge Products

Bases, Whites, and Additives for traditional Discharge Printing



## Ink Application Chart

Name	HM Discharge Base	HM Discharge White	Brite Discharge Base	Brite Discharge White	Brite Discharge Super 75 White
Product Codes	WB0111	WW0201	WB0112	WW0202	WW0203
General Information	High mesh discharge base to be mixed w/Neo pigments	High mesh discharge white	Produces vivid discharge colors when mixed w/Neo pigments	Produces very opaque discharge white	Produces very opaque discharge white (A Blend of Brite Discharge White and Brite Discharge Base)
Color(s)	Milky	White	Milky	White	White
Substrates					
Cotton	Excellent when used on dischargeable dyed garments	Excellent when used on dischargeable dyed garments	Excellent when used on dischargeable dyed garments	Excellent when used on dischargeable dyed garments	Excellent when used on dischargeable dyed garments
Cotton/Polyester	Good for creating a heather/vintage effect on dark garments	Not Recommended	Good for creating a heather/vintage effect on dark garments	Not Recommended	Not Recommended
100% Polyester	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended
Athletic Nylon Mesh	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended
Athletic Polyester	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended
Tight Woven denier cloths	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended
Properties					
Opacity	Poor	Good	Fair	Good	Good
Wet on wet	Excellent	N/A	Excellent	N/A	N/A
Flash Cure	Excellent	Excellent	Excellent	Excellent	Excellent
Dry Cleaning/Ironing	Yes	Yes	Yes	Yes	Yes
Application					
Mesh	110-305 (43-120 cm)	110-230 (43-91cm)	86-180 (34-71cm)	86-160 (34-63cm)	86-160 (34-63cm)
Stencil	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water resistant
Cure Temp	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C
Wash Up	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent
Additives					
Retarder MG/Printgen MG	1-5%	1-5%	1-5%	1-5%	1-5%
Fixer WF-N/Fixer N	1-5%	1-5%	1-5%	1-5%	1-5%
Softener MG/Softener XA-1	1-4%	1-4%	1-4%	1-4%	1-4%
Thickener B/Carrier B	0.25-1%	0.25-1%	0.25-1%	0.25-1%	0.25-1%

Always test inks prior to production to test their fitness for your particular application. Customer is responsible for proper application, suitability, and cure of all inks.

Revised: 09/14

Page 3

# Specialty Inks

Puff, Glitter, Metallics, Pearlescent, Crack, Gel, Burnout, Adhesive, Chromocolor, Photopia, Hydrochromic, and Neonlight



## Ink Application Chart

Name	Foaming Binder/Puff Base	Foil Adhesive TFG 301	Shine Binder/Gel	Rubber Binder/Glitter Base	Crack Binder 812/Crack Base HO	Binder CB/Crack Base	Metallic Binder 301	Pearl Binder 301	Top Print 301-FB
Product Codes	WB0572	WB0056	WS0312	WS0504	WB0009	WB0053	WS0459	WS0508	WS0473
General Information	High concentration foam/puff for creating 3D prints	Adhesive base for foil and flock paper transfers	High gloss 3D gel	Glitter base for blending with dry glitter flakes up to 25%	High Opaque base that creates a unique crack effect(underlay recommended)	Semi-Opaque base that creates a unique crack effect(underlay recommended)	Silver metallic shimmer used as standalone or with Neo pigments	Pearlescent base used as standalone or with Neo pigments	Anti-Foil base. Print in desired area where you don't want foil to stick
Color(s)	Milky	White	Transparent	Milky	White	White	Silver Metallic	Pearlescent	Transparent
<b>Substrates</b>									
Cotton	Excellent on white and lights/on darks mix with Stretch White	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	N/A
Cotton/Polyester	Excellent on white and lights/on darks mix with Stretch White	Excellent	Excellent	Excellent	Excellent on white and lights/on darks use Under Base Blocker	Excellent on white and lights/on darks use Under Base Blocker	Excellent	Excellent	N/A
100% Polyester	Excellent on white and lights/on darks use Under Base Blocker	Excellent	Excellent	Excellent	Excellent on white and lights/on darks use Under Base Blocker	Excellent on white and lights/on darks use Under Base Blocker	Excellent	Excellent on white and lights/on darks use Under Base Blocker	N/A
Athletic Nylon Mesh	Excellent on white and lights/on darks mix with Stretch White	Excellent	Excellent	Excellent	Not Recommended	Not Recommended	Not recommended	Not recommended	N/A
Athletic Polyester	Excellent on white and lights/on darks use Under Base Blocker	Excellent	Excellent	Excellent	Excellent on white and lights/on darks use Under Base Blocker	Excellent on white and lights/on darks use Under Base Blocker	Excellent	Excellent on white and lights/on darks use Under Base Blocker	N/A
Tight Woven denier cloths	Excellent on white and lights/on darks mix with Stretch White	Not Recommended	Excellent	Excellent	Not Recommended	Not Recommended	Not recommended	Not recommended	N/A
<b>Properties</b>									
Opacity	Excellent	Poor	Poor	N/A	Excellent	Very Good	Excellent	Excellent	Excellent
Bleed Resistance	None	None	None	None	None	None	None	None	None
Wet on wet	Yes	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended
Flash Cure	Excellent	Not Recommended	Not Recommended	N/A	Excellent	Excellent	Not Recommended	Not Recommended	Not Recommended
Dry Cleaning/Ironing	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended
<b>Application</b>									
Mesh	60-110 (24-43cm)	60-86 (24-34cm)	80-110 (32-43cm)	25-80 (10-32cm)	60-110 (24-43cm)	60-110 (24-43cm)	80-110 (32-43cm)	80-110 (32-43cm)	110-150 (43-59cm)
Stencil	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water resistant/High Density stencil recommended	Hardened direct water resistant	Hardened direct water resistant/High Density stencil recommended	Hardened direct water resistant/High Density stencil recommended	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water resistant
Cure Temp	320°F-370°/160°C-188°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C
Wash Up	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent
<b>Additives</b>									
Retarder MG/Printgen MG	1-5%	1-5%	1-5%	1-5%	1-5%	1-5%	1-5%	1-5%	1-5%
Fixer WF-N/Fixer N	1-5%	N/A	Must use Fixer V only at 3%	1-5%	1-5%	1-5%	1-5%	1-5%	N/A
Softener MG/Softener XA-1	1-4%	1-4%	1-4%	1-4%	1-4%	1-4%	1-5%	1-5%	1-4%
Thickener B/Carrier B	0.25-1%	0.25-1%	0.25-1%	0.25-1%	0.25-1%	0.25-1%	0.25-1%	0.25-1%	N/A

Always test inks prior to production to test their fitness for your particular application. Customer is responsible for proper application, suitability, and cure of all inks.

# Specialty Inks

Puff, Glitter, Metallics, Pearlescent, Crack, Gel, Burnout, Adhesive, Chromocolor, Photopia, Hydrochromic, Neonlight and Aroma



## Ink Application Chart

Name	Under Base Blocker 301 Gray	Under Base Blocker 301 Black	Chromicolor AQ	Photopia AQ	Hydrochromic White	Neonlight/Glow in the dark	Printgen OP- 30PS/Burnout Base
<b>Product Codes</b>	<b>WS0467</b>	<b>WS0482</b>		<b>Blue AQ-T Purple AQ-R Yellow AQ- G</b>	<b>1901</b>	<b>Blue WR Green WR</b>	<b>RM0037</b>
<b>General Information</b>	Gray blocker base to stop dye migration on polyester fabrics	Black blocker base to stop dye migration on polyester fabrics	Temperature sensitive pigments that can be blended with any of our 301 bases up to 20%	Light sensitive pigments that can be blended with any of our 301 bases up to 20%	Water sensitive base white that disappears when wet	Glow in the dark pigments that can be blended with any of our 301 bases up to 20%	Blend Printgen QP 4400 Paste at 60% with 40% Printgen OP-30PS to create a burnout effect
<b>Colors</b>	Gray	Black	11 colors available that react to temperature	3 colors available that react to sunlight and ultraviolet light	White	2 colors available	White
<b>Substrates</b>							
Cotton	Not Recommended	Not Recommended	Excellent	Excellent	Excellent	Excellent	Not Recommended
Cotton/Polyester	Excellent	Excellent	Excellent	Excellent	Not Recommended	Excellent	Excellent
100% Polyester	Excellent	Excellent	Excellent	Excellent	Not Recommended	Not Recommended	Not Recommended
Athletic Nylon Mesh	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended
Athletic Polyester	Excellent	Excellent	Excellent	Excellent	Not Recommended	Not Recommended	Not Recommended
Tight Woven denier cloths	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended
<b>Properties</b>							
Opacity	Excellent	Excellent	N/A	N/A	Good	None	Poor
Bleed Resistance	Excellent	Excellent	None	None	None	None	None
Soft Hand	Very Good	Very Good	N/A	N/A	Good	N/A	Excellent
Wet on wet	N/A	N/A	N/A	N/A	Not Recommended	N/A	N/A
Flash Cure	Excellent	Excellent	N/A	N/A	Excellent	N/A	N/A
Dry Cleaning/Ironing	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Application</b>							
Mesh	80-120 (32-47cm)	80-120 (32-47cm)	60-120 (24-47cm)	80-120 (32-47cm)	80-110 (32-43cm)	80-125 (32-49cm)	38-60 (15-24cm)
Stencil	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water resistant	Hardened direct water resistant
Cure Temp	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C
Wash Up	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent	Water and mild soap or detergent
<b>Additives</b>							
Retarder MG/Printgen MG	1-5%	1-5%	1-5%	1-5%	1-5%	1-5%	1-5%
Fixer WF-N/Fixer N	1-5%	1-5%	1-5%	1-5%	1-5%	1-5%	N/A
Softener MG/Softener XA-1	1-4%	1-4%	1-4%	1-4%	1-4%	1-4%	N/A
Thickener B/Carrier B	0.25-1%	0.25-1%	0.25-1%	0.25-1%	0.25-1%	0.25-1%	N/A

Always test inks prior to production to test their fitness for your particular application. Customer is responsible for proper application, suitability, and cure of all inks.

Revised: 09/14

## Additives

Retarder, Softener, Cross-linking Agents, Reducer, Thickener and Discharge Agent  
Additives cannot be used as a standalone product, must be mixed into a curable base at recommended uses



Ink Application Chart

Name	Retarder MG/Printgen MG	Softener MG/Softener XA-1	Fixer WF-F	Fixer WF-N	Emacol R-600-E	Catalyst 3000/RV Additive	Carrier B/Thickener B	Discharge Agent
Product Codes	RM0590	WB1011	RM0461	RM0480	RM0471	RM0459	RM0680	RM0456
General Information	Anti-Clogging Agent/Penetrant	Silicone softener to help with hand of print/Also blend in to inks at 10% to act as a foil release additive	Cross-Linking agent to help with wash fastness/Low cure additive	Environmentally friendly Cross-Linking agent to help with wash fastness/Low cure additive	Surfactant that raises viscosity and helps with leeching/Gives ink a thicker long body	Additive to help reduce viscosity and help the ink penetrate into the fabric	Surfactant that raises viscosity and helps with leeching/Gives ink a thicker short body	Crystal additive to activate discharge bases and white
Colors	Transparent	Milky	Milky	Milky	Milky	Transparent	Light Tan Liquid	White
<b>Application</b>								
Recommended Use	1-5%	1-4%	2-3%	1-4%	.25-1%	1-3%	.25-1%	1-10%
Special Instructions	Mix well in to ink before printing	Mix well in to ink before printing/Can be added to water at 25% to create a cleaning solution	Use ink within 24 hours of mixing/lowers cure temp of inks when added to base	Passes all RSL's/lowers cure temp of finish good when added to base	Mix with high speed mixer/can take up to 30 minutes after mixing to achieve true viscosity	Mix well in to ink before printing	Mix with high speed mixer/can take up to 30 minutes after mixing to achieve true viscosity	Mix with high speed mixer/can take up to 15 minutes after mixing to completely activate
Cure Temp	320°F /160°C	320°F /160°C	250°F /120°C	300°F /150°C	320°F /160°C	320°F /160°C	320°F /160°C	320°F /160°C

Always test inks prior to production to test their fitness for your particular application. Customer is responsible for proper application, suitability, and cure of all inks.

Revised: 09/14

Page 6