



Wilflex™ additives are specially designed to increase productivity and assist your creative efforts. Our additives can change ink viscosities, improve printability, enable three dimension effects or help meet the need for specific production requirements. Proper use of any additive, as detailed in the respective Product Information Bulletin (PIB), is highly recommended.

www.wilflex.com/pib to access all Wilflex™ Product Information Bulletins

Viscosity Modifiers

Curable Reducer - 10070REDUCER

- ▶ Viscosity reducer that will cure within standard plastisol range.
- ▶ 5% addition will lower viscosity of most inks by 25%
- ▶ Review PIB for application details.

Viscosity Buster - 10025VB

- ▶ Universal additive is the best way to improve flow without changing ink properties.
- ▶ Highly effective with only 1-3% additions by weight.
- ▶ Review PIB for application details.

Thickener 2 - THICKENER2

- ▶ Increase viscosity and body for improved opacity and high density printing.
- ▶ Review PIB for application details.

Thickener 3 - THICKENER3

- ▶ Highly concentrated liquid thickener to increase viscosity and body.
- ▶ Review PIB for application details.

Extenders

Smooth Extender - 10222SE

- ▶ Extend plastisol inks without changing the overall printing properties.
- ▶ Review PIB for application details.

Finesse - 10150FNS

- ▶ Extend inks and reduce viscosity with 10-20% additions.
- ▶ Review PIB for application details.

Softeners

Soft Hand Clear - 10140CLEAR

- ▶ A clear plastisol base designed to soften the hand and slightly lower viscosity.
- ▶ Review PIB for application details.

Soft Hand Additive - 10840SHA

- ▶ Concentrated additive designed to soften inks and improve printability without reducing viscosity.
- ▶ Review PIB for application details.

Miscellaneous

Foil Resist Additive - 10080FRA

- ▶ Small additions will prevent foil from adhering to plastisol inks.
- ▶ Review PIB for application details.

Dulling Additive - DULLADD

- ▶ Additions of 7-10% to reduce gloss.
- ▶ Review PIB for application details.

Flexipuff Extra - 10531FLEX

- ▶ Mix with plastisol inks to produce a raised or elevated effect.
- ▶ Review PIB for application details.

Straight Up Additives

- ▶ Add to plastisol inks to create three-dimensional effects.
- ▶ WP220SUP Gloss
- ▶ WP221SUP Satin
- ▶ WP222SUP Suede
- ▶ Review PIB for application details.

Stretch Additive - 10108SA

- ▶ Increase elongation in plastisol inks.
- ▶ May be used as a base.
- ▶ Review PIB for application details.

Flash Additive - FLASHADD

- ▶ Lower flash temperature of inks.
- ▶ Review PIB for application details.

FR Additive - 10150PC

- ▶ PC concentrate mixed into plastisol inks to add suitable flame retardant properties.
- ▶ Review PIB for application details.

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WILFLEX® REDUCERS, THICKENERS & EXTENDERS

See chart for recommended limits.

REDUCERS

- **CURABLE REDUCER 10070RED:** Viscosity reducer that will cure at standard plastisol cure temperatures (320 F/160 C), which ensures that you can lower ink viscosity without fear of cure problems. Curable Reducer is an efficient reducer and an addition of 5% by weight will lower the viscosity of most Wilflex inks by 25%. Additions greater than 10% may reduce bleed resistance and opacity. Any dramatic changes in viscosity may result in altered printing characteristics.
- **VISCOSITY BUSTER 10025VB:** Additions of 1-3 % by weight will stabilize and improve the flow properties of finished ink. Do not use more than 3% by weight! This product is very efficient in small amounts. Will not affect Bleed Resistance or opacity, when used as directed.
- **REDUCER #1:** Reducer 1 is a plasticizer blend, therefore, excessive use may cause cure and bleed problems. Preferred reducer is Curable Reducer or Viscosity Buster.
- **REDUCER #11:** Plastisol viscosity reducer, plasticizer type, suited for SSV-FF and MCV-FF ink lines. Up to 5 % (by weight) recommended.

THICKENERS

- **THICKENER #1:** Viscous brown liquid used to increase viscosity and add body to low viscosity inks. Recommended limit: up to 3% by weight.
- **THICKENER #2:** White Powder- An essential for High Density printing. Additions up to 8 oz. cup per gallon of ink are recommended to body and stiffen a finished ink. By increasing viscosity, the ink film will sit on substrate surface, improving opacity. Excessive amounts of Thickener 2 will cause build-up on back of screen and accelerate the aging of the ink viscosity. A mask is recommended when handling Thickener 2. High speed, high shear mixing will disperse powder without lumping. Be cautious to not overheat the ink.
- **THICKENER #3:** Use this thickener as a final addition to GNS, OPM, and MX. Adjusting with Thickener 3, it is important to add .5 - 1% (MAXIMUM) to 100 parts ink. Be sure to weigh the amount precisely, as an over-addition will dramatically reduce printability.
- After adding Thickener 3, stir thoroughly, but do not overheat mixture. You may not notice an immediate build after the introduction of Thickener 3, but refrain from adding more than 1% as the additive may take time to work (up to two hours). Wilflex recommends mixing only what you need to complete the job as any leftover ink may become difficult to print later.

EXTENDERS

- **SMOOTH EXTENDER 10222SE:** A soft-hand extender for Wilflex inks. Soften inks and increase flow properties and printable characteristics by mixing 10-

20% by weight with inks that exhibit high tack. Additions greater than 20% can reduce opacity and bleed resistance. May also be used as a process base to extend primary colors or mix with other colors to increase color vibrancy in transparent ink.

- **FINESSE 10150FNS:** A plastisol additive designed to soften and extend general purpose and specialty Wilflex inks. Additions of 10-20% may be used to improve printability and soften hand. Additions greater than 20% will reduce opacity. Pre-test the product to ensure that the desired characteristics are present before a production run.
- **SOFT HAND CLEAR 10140CLEAR:** A soft, clear plastisol designed to blend with general purpose and specialty plastisol inks to soften and extend inks. Tends to drop viscosity slightly. Will reduce build-up while making inks easier to print.
- **PROMATCH CLEAR 10853CLR:** A clear plastisol designed to blend with process plastisol inks to soften and extend inks. Will reduce build-up while making inks easier to print.

MISCELLANEOUS ADDITIVES

- **DULLING ADDITIVE:** Additions of 7-10% by weight to Genesis inks will reduce gloss of surface and will not interfere with print properties. Dulling Additive is curable and addition greater than 10% may be used, but print characteristics will change.
- **FLEXIPUFF ADDITIVE 10520:** Formulated to be mixed with Wilflex general-purpose inks (GNS, MP, MX) to give a raised or elevated effect. Flexipuff may be added in amounts of 30% by weight.
- **FLASH ADDITIVE (FLASHADD):** Add up to 10% by weight of this powder to GNS or MP inks to lower flash temperature. However, this product will alter the print characteristics of these inks and cause build-up when printing wet-on-wet.
- **STRAIGHT-UP HIGH DENSITY ADDITIVES:** Add to existing inks, like MX, to create totally innovative, three-dimensional.
WP220SUP GLOSS WP221SUP SATIN WP222SUP SUEDE
- **STRETCH ADDITIVE 10108SA:** Increase elongation of Wilflex general-purpose inks (GNS MX, SB) by adding 1part additive to 2 parts finished color.

USAGE CHART FOR WILFLEX ADDITIVES and EXTENDERS

	Reducers		Extenders			Viscosity Modifiers		
Ink Series	Reducer #1 *Disc I/0/02	Reducer #11	Finesse 10150	SoftHand Clear 10140	Curable Reducer 10070	Thickener #2	Thickener #3	Viscosity Buster
Whites	0-5% by weight	NR	5-15% by weight	0-10% by weight > 10% will alter ink properties by reducing opacity & BR	0-10% by weight	3% by weight MAX	NR	1-3%
GNS	0-5% by weight	NR	10-20% by weight (20-100%,when opacity not critical)	0-20% by weight	0-10% by weight	3% by weight	.5-1% by weight	1-3%
MX OPM	NR	NR	10-20% by weight (20-100%,when opacity not critical)	0-20% by weight	0-10% by weight	1-3% by weight	.5-1% by weight	1-3%
SSV	0-5% by weight	NR	10-20% by weight	0-30% by weight	0-10% by weight	1-3% by weight	NR	1-3%
NPF Suedes	0-3% by weight	NR	0-10% by weight	0-10% by weight > 10% will alter ink properties by reducing puff height	0-5% by weight	NR	NR	1-3%
TF	0-5% by weight	NR	NR	NR	NR	NR	NR	1-3%
MCV-FF & SSV-FF	NR	0-5% by weight	0-10% by weight	0-10% by weight > 10% will alter ink properties by raising cure temperatures	0-10% by weight > 10% will alter ink properties by raising cure temperatures	NR	NR	1-3%
HD Clear	NR	NR	10-20% by weight	0-30% by weight	0-10% by weight	NR	NR	1-3%
Straight-UP inks	NR	NR	NR	NR	0-10% by weight	NR	.5-1% by weight	1-3%
Rock Base	NR		10-20% by weight	0-30% by weight	0-10% by weight	NR	.5-1% by weight	1-3%
MSH Nylon Mesh OSN	NR	NR	Use I1422MSH Base as extender	NR	NR	NR	NR	1-3%

Effective 11/12/2001. Not all Wilflex products are available in every country. The information in this publication is based on information and experience believed reliable. Since many factors may affect processing for an application, processors must carry out their own tests and experiments to confirm suitability for intended use. You must make your own determination of suitability for your intended use and environmental acceptability, the safety and health of your employees, and purchasers of your product.