Rutland Plastic Technologies, Inc.

Rutland™

Technical Data Sheet #322
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Claira™Non-Phthalate Modifiers and Additives

NPT Specialty Modifiers, Additives, and Bases

Description

EA0001 NPT FiberBond – Mix NPT Fiberbond at 3% by weight to colors when printing on light cotton garments to reduce fibrillation. Mix 7.5% by weight to EN (NPT Nylon Mesh Series) inks for printing on tightly woven nylon such as umbrellas, bags and nylon jackets. Note: Once mixed the ink has a shelf life of no more than 8 hours.

EA0005 NPT Viscosity Reducer – Use EA0005 at 1.0% to 3.0% by weight to reduce the viscosity of thick ink. This product will not cure and should always be mixed in the correct ratio with a base.

EA0011 NPT Reducer #2 – Use EA0011 at 1.0% by weight to reduce the viscosity of thick ink. This product will not cure and should always be mixed in the correct ratio with a base.

EA0014 NPT Transfer Adhesive Powder – Adhesive powder to sprinkle onto wet transfer prints before gelling the prints. It provides superior adhesion when making transfers that will be applied to difficult fabrics such as nylon and polyesters.

EA0015 NPT Dulling Paste/ Suede Additive – Mix EA0015 at 3% by weight into the wet plastisol to eliminate gloss after it is cured. Use it at 10 to 15% to create suede looking plastisol. This product will not cure and should always be mixed in the correct ratio with a base.

EA0055 NPT Puff Additive – EA0055 is a puff concentrate. Use at up to 15% by weight to make a puff ink from any NPT opaque plastisol color. Mix thoroughly. EA0055 may also be used to take the gloss from plastisol ink. Add 2% by weight to an NPT plastisol ink to make a matte finish.

EA0333 NPT Thickener #3 – EA0333 is a non-phthalate paste thickener that can be used with Rutland's NPT technology to raise the viscosity of the ink while maintaining the non-phthalate status of the ink. Add EA0333 directly into the NPT inks at 0.25% increments up to a maximum of 1%. Note: it may take up to 2 hours for the thickener to fully activate depending which ink series being thickened.

EH0542 NPT HO Matte Base – Mix with C3 NPT Color Boosters to create opaque colors for 100% cotton. Use up to of 50% C3 NPT Color Boosters or simply follow the recipe from the M2007 Ink Mixing Software. EH0542 can also be used as an extender to reduce pigment load in opaque inks. The mixture can print through a wide variety of mesh ranges and will cure at 320 degrees F. (160 degrees C.)

EN0053 NPT NM Base - EN0053 is used as a clear base to mix C3 NPT Colorbooster colors into a finished Non-Phthalate nylon mesh ink. Use formulations from the M2007 Software for the C3 colors and simply insert EN0053 as the base. The mixture can print through a wide variety of mesh ranges and will cure at 320 degrees F. (160 degrees C.)

ES0000 NPT Ultra Soft Primer Clear – NPT Primer clear can be mixed with other plastisol inks at a 1:1 ratio to create a very soft hand feel for printing on light colored cotton, however, to maintain a non-phthalate product, only mix it with NPT inks. NPT Primer clear used as an under coat will assist in locking the fibers in place, and improving fibrillation. It is typically printed through high mesh range (200 mc.in.(78 mc. cm.) and above). The mixture can print through a wide variety of mesh ranges and will cure at 320 degrees F. (160 degrees C.)

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ES0005 NPT Plastisol Thinner – Use NPT Plastisol Thinner as a Curable Reducer. As a reducer add any amount to a mixed ink to reduce the viscosity for easier printing or to allow the ink to penetrate the fibers more completely for a softer feel. Please note that addition of any soft hand product could cause increased fibrillation or fading of the print during the laundry process. The use of NPT Plastisol Thinner does not change the cure parameters of NPT plastisol inks.

ES0022 NPT Tack Free Additive - Mix up to 5% NPT Tack Free additive into a NPT ink to reduce the wet ink tack for easier printing and the after tack (Hot Tack) after a flash. Adding NPT Tack Free additive will reduce the bleed characteristics of Low Bleed inks and increase the flash cure time depending on how much is used.

ES0026 NPT Thermoline Clear – May be printed as a foil adhesive, clear over coat, and or tinted with NPT C3 Colorboosters to produce rich clear glossy colors. The mixture can print through a wide variety of mesh ranges and will cure at 320 degrees F. (160 degrees C.)

ES0031 NPT Spandesol Clear – Use ES0031 as a base for NPT Color Boosters. Add up to 30% by weight to make colors that will print on Nylon Lycra/Spandex. This product is not low bleed and will bleed if printed on Poly Lycra/Spandex. The mixture can print through a wide variety of mesh ranges and will cure at 320 degrees F. (160 degrees C.) For superior stretch, print through lower screen mesh. (86 – 110 mc/in. (34 – 43 mc/Cm.))

ES0250 NPT CHINO BASE – Use NPT Chino Base as a base per Technical Data Sheet #309 or use it as a Curable Reducer. As a reducer add any amount to a mixed ink to reduce the viscosity for easier printing or to allow the ink to penetrate the fibers more completely for a softer feel. Please note that addition of any soft hand product could cause increased fibrillation or fading of the print during the laundry process. The use of NPT Chino Base as a reducer does not change the cure parameters of NPT plastisol inks.

ES0620 NPT Black Light Clear – Use NPT Black Light Clear as a print clear. It gives a clear wet look on dark fabric to produce a tone on tone look. Once exposed to Ultra Violet light or (Black Light) it luminesces to a blue whitish glow. May also be used as a top coat clear. Only mix with NPT plastisol inks to maintain the non-phthalate status. Cures at 320 degrees F. (160 degrees C.) Print through a wide range of screen mesh.

ES0623 NPT AP Clear – Use NPT AP Clear as a base for metallic powders. Use up to 15% Metallic Flake to mix into the AP Clear. May also be used as a top coat clear or added to any plastisol ink as an extender however, extending any plastisol color will decrease opacity. Only mix with NPT plastisol inks to maintain the non-phthalate status. Note: Some metallic flakes contain phthalates. Rutland's CS flakes do not contain phthalates.

ES0840 NPT Clear S.H.A.P.E. – ES0840 is used to extend a plastisol ink and to make it print with a softer hand. ES0840 may be mixed in at any ratio but it will reduce the opacity and color strength of the ink. The mixture can print through a wide variety of mesh ranges and will cure at 320 degrees F. (160 degrees C.) Only mix with NPT plastisol inks to maintain the non-phthalate status.

EV0640 NPT Clear – Use NPT Clear as a base for making bright transparent colors. Mix C3 Color Boosters into the clear per formula. May also be used as a top coat clear or added to any plastisol ink as an extender however, extending any plastisol color will decrease opacity. Only mix with NPT plastisol inks to maintain the non-phthalate status. Prints through a wide range of mesh sizes. Cure mixtures and or stand alone clear at 320 degrees F. (160 degrees C.)

EV0840 EV S.H.A.P.E. – EV0840 is a non-phthalate, PH balanced clear used to extend a plastisol ink and to make it print with a softer hand. EV0840 may be mixed in at any ratio but it will reduce the opacity and color strength of the ink. The mixture can print through a wide variety of mesh ranges and will cure at 320 degrees F. (160 degrees C.) Only mix with NPT plastisol inks to maintain the non-phthalate status. EV0840 is only sold in markets where PH control is a requirement.

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M00009 Quick Flash Additive – M00009 is mixed into a plastisol at up to 10% by weight to speed up the flash cure time of the ink. Make sure to mix thoroughly. Ink will become thicker with more powder additive.

M00010 Powder Thickener #10 – Add up to 1% by weight to thicken a plastisol. Thicker plastisol inks will print with more opacity. Make sure to stir properly to insure a complete mixture. This may require a mechanical mixer. Results are immediate.

M00023 Flame Retardant Additive – Rutland Flame Retardant Plastisol (Our Standard or Non-phthalate series made by adding
7.5 to 10% of our Flame Retardant Additive) is a self-extinguishing material if the ink has been properly fused. However, it is up to the printer to have the composite of the flame retardant garment and the flame retardant ink tested and certified as a unit to pass the appropriate burn test. Rutland can state only the flame resistance of Rutland's Flame Retardant plastisol product or the product if mixed with proper ratio of Flame Retardant additive and cannot guarantee that it will Flame Retard the textile article that it may be printed onto. Rutland cannot guarantee the Flame Resistance of the plastisol if it has been modified, diluted or blended with other products before printing. The mixing of the proper ratio of Rutland's M00023 Flame Retardant Additive into Rutland's Standard or Non-phthalate opaque printing inks should be self extinguishing. Some settling will occur with time. STIR THIS PRODUCT COMPLETELY BEFORE USE.

This product qualifies as a non-phthalate modifier and would test as such if mixed with all non-phthalate plastisol products.

M30063 NPT Extender Base – Mix into the M3 ink system to extend the volume of ink. Remember as you add base, you are reducing opacity and color strength. C3 Color Boosters can be added to the M30063 NPT Extender Base to create lower viscosity printing inks.
Cure is 320 degrees F. (160 degrees C.)