



UV Ink Vehicles

This is a list and brief description of many of our most popular Kustom Kure vehicles and photoinitiators for litho and flexo ink systems. You can contact us for more information regarding our wide array of products for your special application.

UV Litho

Our Kustom Group Energy-Curable products are designed to provide superior litho performance without misting or sacrificing any cure speed. These products provide excellent adhesion to various substrates such as plastic, foil-coated and poly-coated board, as well as paper. Most significantly, these products will allow the ink maker to achieve the highest gloss possible in an Energy-Curable ink system. Some of our Energy-Curable products are listed as follows:

Green UV Vehicles

GRN-1000 Green UV Gel Vehicle: GRN-1000 is a 25-30% renewable/sustainable UV gel vehicle derived from naturally occurring raw materials. It achieves "Green Status" without compromising finished ink properties. Extensive press testing shows superior press performance versus traditional UV epoxy and polyester chemistry

GRN-1001 Green UV Free Flow Vehicle: GRN-1001 is a companion free flow vehicle to GRN-1000.

Vehicles for Paper

KS-276 Low Tack UV Gel Vehicle: KS-276 is a low tack, tight-gel, modified polyester vehicle. KS-276 is proprietary chemistry unique to Kustom Group. It is our best UV vehicle for litho and rivals that of conventional oil-based inks. It has outstanding hold-out and gloss. Recommended for all coated paper applications.

KS-270 UV Vehicle for Paper: KS-270 is a higher tack, less-gelled version of KS-276. KS-276 is proprietary chemistry unique to Kustom Group.

KS-271 UV Freeflow Vehicle for Paper: KS-271 is a companion vehicle to KS-276 and KS-270. KS-276 is proprietary chemistry unique to Kustom Group.

KS-291 UV Freeflow Vehicle: KS-291 is our most economical freeflow vehicle and can be used with KS-265, KS-276 and KS-270.

KS-265 **UV Forms Gel Vehicle:** KS-265 is ideal for UV forms and all uncoated stocks. KS-265 can be used in those instances where low tack, fast-curing inks are necessary. Because of its low tack nature, KS-265 allows the ink maker to make an energy-curable ink with little or no free monomer. This reduction in monomer produces an extremely fast-curing, high hold-out ink at conventional tack ranges and comparable UV ink cure speeds at very low tacks.

KS-383 **Photoinitiated UV Extender Vehicle for Paper:** KS-383 is a UV vehicle that already includes a unique photoinitiator blend, so little or no extra photoinitiator is required when formulating ink. KS-383 is a balanced extender with excellent litho properties built into it.

Vehicles for Plastic

KS-369 **UV Gel Vehicle for Plastic:** KS-369 exhibits excellent adhesion to a variety of plastic substrates. Other performance properties include high viscosity, reduced ink misting, and high hold-out. Additionally, KS-369 has lithographic performance which rivals conventional oil-based inks. For use on rigid plastics (polyethylene, polypropylene, etc.).

KS-368 **Modified Acrylated Polyester Oligomer:** KS-368 is a companion freeflow vehicle to KS-282.

KS-282 **UV Gel Vehicle for Plastic:** KS-282 exhibits the best combination of adhesion and cure speed. Typical applications include a variety of plastics and other non-porous substrates.

UV Dispersion Vehicles

KS-345 **UV Grinding Vehicle:** KS-345 has shown excellent pigment wetting and is a workhorse UV dispersing vehicle. KS-345 is an excellent choice for plastic and paper substrat

KS-302 **UV Flushing and Grinding Vehicle:** KS-302 is our best-wetting vehicle and is especially effective for hard-to-disperse pigments, such as Lithol Rubine, Carbon Black, and Alkali Blue, among others. KS-302 exhibits excellent litho properties and will improve flow and transfer. KS-302 is an excellent choice for Hybrid ink. Keep in mind KS-302 has only moderate cure speed and may require the addition of a higher reactive vehicle for some applications.

Liquid Photoinitiators

KS-286 **High Potency Photoinitiator:** KS-286 is a balanced, stand-alone, 100% active photoinitiator for litho, flexo and screen inks. Use at 3-6% levels or as needed for adequate cure.

KS-246 **Photoinitiator for White Inks:** KS-246 is effective as a stand-alone photoinitiator for litho, flexo, and screen white inks. Use at 7-10% levels or as needed for adequate cure.

KS-203 **High Viscosity All-In-One Photoinitiator:** KS-203 is an economical, photoinitiator that includes top- and through-cure properties. Its high viscosity will not lower final ink tack or viscosity. Use at 5-8% levels or as needed for adequate cure. Recommended for litho applications.

UV Flexo

Kustom Group has developed its Kustom Kure UV flexo ink materials with the understanding that it is necessary to achieve the highest possible strength with the lowest possible viscosity and thixotropy. To accomplish this goal, it is necessary to have the maximum amount of compatibility throughout all aspects of the UV flexo ink formulation. For this reason, we have listed UV grinding vehicles, extenders, and photoinitiators that have been developed to compliment each other. The products we recommend are as follows:

Vehicles

KS-358	UV Flexo Modified Epoxy Grinding Vehicle	For use as a general purpose grinding vehicle in UV flexo ink for paper and plastic applications. More economical versus KS-359 with good film properties.
KS-359	Acrylated Polyester Oligomer	For use as a grinding vehicle <i>or</i> a letback vehicle in UV flexo ink for paper and plastic applications.
KS-380	UV Flexo Extender	For use as a general purpose letback vehicle in UV flexo ink for paper and plastic applications. More economical vs. KS-359 with good film properties.

Photoinitiators

KS-246	Flexo Photoinitiator for White Inks	Excellent for through-cure of flexo and litho white inks.
KS-286	High Potency Photoinitiator	100% active photoinitiator for use in all colors of UV flexo ink except white.
KS-373	Photoinitiator Compound	100% active photoinitiator for use in light colors of UV flexo ink.

FOR YOUR PROTECTION: The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning uses or applications are only the opinion of KUSTOM GROUP, and users should make their own tests to determine the suitability of this product for their own particular purposes. However, because of numerous factors affecting results, KUSTOM GROUP makes no warranty of any kind, expressed or implied, including those of merchantability and fitness for particular purpose, other than that the material conforms to its applicable current Standard Specifications. Standard Specifications, although current at the time of publication, are subject to change without notice. Please refer to the Technical Data Sheet and MSDS for additional information on each product.

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