



Kustom Kure Energy-Curable Litho Ink Materials

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:

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.

- Tack: 20.0 – 24.0 @ 400 rpm/1'
- Viscosity: 700 – 1000 Poise
- Yield: 6000 – 10,000 dynes/cm²

KS-236 Gelled Fatty Acid Modified Hexa-functional Polyester: Excellent misting, litho properties and good pigment wetting. KS-236 can be used as a dispersion vehicle to improve rheology. Use for paper and plastic substrates.

- Tack: 4.0 – 8.0 @ 400 rpm/1'
- Viscosity: 100 – 300 Poise
 - Yield: 1000 – 3000 dynes/cm²

KS-296 UV/Hybrid Low Tack Gel Vehicle: KS-296 is lower tack and higher structure versus KS-276. KS-296 is formulated with a higher molecular weight resin system than traditional UV oligomers. KS-296 inks will require less monomer and will give better misting. This is proprietary chemistry unique to Kustom Group.

- Tack: 13 – 15 @ 400 rpm/1'
- Viscosity: 400 – 600 Poise
- Yield: 4200 – 5200 dynes/cm²

KS-291 UV Free Flow Vehicle for Paper: KS-291 is an economical companion free flow vehicle for paper. KS-291 is proprietary chemistry with excellent litho properties unique to Kustom Group.

- Tack: 24 – 28 @ 400 rpm/1'
- Viscosity: 400 – 600 Poise

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 01/30/2018

- KS-299** **UV Epoxy F.F. for Paper:** Epoxy cut in 40% TMPTA. It is economical and has fast cure.
- Viscosity: 75 – 85 Poise
- KS-265** **UV Forms Gel Vehicle:** For UV forms and all uncoated stocks. Properties include low tack, high hold out, and fast cure. Typically, little or no free monomer is needed. Inks based off of KS-265 are fast-curing, have high hold-out and can be formulated to very low tacks.
- Tack: 7.0 – 9.0 @ 400 rpm/1'
 - Viscosity: 300 – 500 Poise
 - Yield: 800 – 1500 dynes/cm²
- 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.
- Tack: 9 – 12 @ 400 rpm/1'
 - Viscosity: 500 – 800 Poise

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. Use on rigid plastics (Polyethylene, Polypropylene, etc.).
- Tack: 20 – 24 @ 400 rpm/1'
 - Viscosity: 1500 – 2000 Poise
 - Yield: 8000 – 12,000 dynes/cm²
- KS-230** **UV Gel Vehicle for Packaging:** Considered low odor and low migration for food packaging applications. **KS-230 is formulated with materials that are Nestle compliant (ref. Nestle Guidance Note on Packaging Inks 21 Feb 2014).** Use on plastic, coated board, and paper substrate.
- Tack: 22 – 26 @ 400 rpm/1'
 - Viscosity: 850 – 1050 Poise
 - Yield: 5500 – 8500 dynes/cm²
- KS-331** **UV/EB Metal Deco Vehicle:** High viscosity, free flow vehicle for UV/EB metal deco lithographic inks. It has excellent adhesion to a variety of plastic substrates.
- Viscosity: 2000 – 4000 Poise
- KS-214** **UV Free Flow Vehicle for Plastic:** KS-214 is recommended as an adhesion promoter for UV-curable lithographic and flexographic inks where high performance and good adhesion are desired.
- Viscosity: 400 – 800 Poise

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 01/30/2018

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. ***KS-368 is the free flow version of KS-282.***

- Tack: 25 – 30 @ 400 rpm/1'
- Viscosity: 650 – 900 Poise
- Yield: 5000 – 8000 dynes/cm²

KS-371 KS-371 is formulated specifically for adhesion to plastic. KS-371 is the free flow companion vehicle to our UV Gel vehicle for plastic, KS-369. It is recommended for UV-curable lithographic offset inks where high performance and good adhesion are desired.

Viscosity: 1000-3000 Poise

UV Dispersion Vehicles

KS-322 High Pigment Load Dispersant Grinding Vehicle: KS-322 is a higher concentrated, lower viscosity version of KS-204. It is an excellent choice for dry grinding in carbon black pigment. Use at 10 - 15% in place of dispersants. Use in flexo, UV inkjet, and as an additive in offset litho dispersions. Good adhesion to plastic substrates.

- Viscosity: 45 – 60 Poise

KS-204 UV Grinding Vehicle: KS-204 is an all purpose grinding vehicle for UV/EB lithographic, dry offset and flexographic ink. This is proprietary chemistry with truly unique adhesion and wetting properties on all nonporous substrates, including most plastics and metal deco applications.

- Tack: 7 – 11 @ 400 rpm/1'
- Viscosity: 150 – 225 Poise

KS-307 Fatty Acid Modified Hexa-functional Polyester: Recommended as an additive for flow, flexibility and pigment wetting. KS-307 has good litho properties and cure speed.

- Viscosity: 65 – 85 Poise

KS-302 UV Flushing and Grinding Vehicle: KS-302 is ideal for hybrid ink. It is an excellent 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 has only moderate cure speed and may require the addition of a higher reactive vehicle for some applications.

- Viscosity: 400 – 700Poise

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 01/30/2018

Liquid Photoinitiators

- KS-308** **High Potency Photoinitiator:** KS-308 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.
- Color: yellow
 - Viscosity: 220-280 Poise
- KS-210** **Photoinitiator for White Inks:** KS-210 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.
- Color: clear
 - Viscosity: 18 – 25 sec. #2 Zahn
- 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.
- Color: light yellow
 - Viscosity: 1500 – 2500 Poise

Additives for UV/EB Inks

- KS-297** **High Cross-Linking Monomer:** Increases cure speed and hardness without additional photoinitiator. Usage level 1 - 4%; too much can cause loss of adhesion and brittleness.
- KS-388** **UV Silicone Additive:** Use as a silicone additive for leveling, wetting, and lowering COF (Coefficient of Friction) in UV coating and ink systems. KS-388 has a recommended dosage of 0.2 - 1%.
- KS-347** **Defoamer for UV/EB:** Powerful defoamer recommended for use in UV-curable coatings and overprint varnishes. ***Not printable.***
- KB-756** **Kentucky Lube for UV/EB:** Provides lubrication of the ink on the plate and blanket cylinders. Prevents piling and picking problems and reduces misting by allowing ink to operate at a higher tack. Usage level is 2 - 5%.
- KB-147** **Dry Talc:** Dry additive used to reduce misting. Usage level is 1 - 2%.
- KS-279** **UV Stabilizer:** In-can polymerization inhibitor. Usage level is 0.5 - 1%.

We also carry standard monomers, oligomers and gelled versions of both.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 01/30/2018

Kustom Kure – Energy-Curable Lithographic Formulary Guide for Paper and Paperboard



High Gloss Ink System (coated and high-weight paper and paperboard)

<u>Materials</u>	<u>Yellow Ink</u>	<u>Red Ink</u>	<u>Blue Ink</u>	<u>Black Ink</u>
KS-204/KS-307 Based Yellow Base ¹	30 - 40%	---	---	---
KS-204/KS-307 Based Red Base	---	45 - 55%	---	2 - 4%
KS-204/KS-307 Based Blue Base	---	0 - 1.0%	40 - 50%	2 - 4%
KS-204/KS-307 Based Black Base	---	---	---	30 - 40%
KS-276 Kustom UV Gel	35 - 45%	20 - 30%	25 - 35%	30 - 40%
KS-299 Kustom UV Freeflow	5 - 10%	5 - 10%	5 - 10%	5 - 10%
KS-308 Kustom High Potency. P.I.	0 - 2%	0 - 3%	2 - 4%	3 - 5%
KS-203 Kustom High Visc. Photoinitiator	2 - 5%	2 - 4%	2 - 4%	2 - 4%
KS-244 EOTMPTA	2 - 4%	2 - 4%	2 - 4%	2 - 4%
KB-756 Kentucky Lube for UV ²	0 - 3%	0 - 3%	0 - 3%	0 - 3%

Adjust tack to 16 - 18 @ 1200 rpm/1'

Forms/News Ink System (uncoated and low-weight paper)

<u>Materials</u>	<u>Yellow Ink</u>	<u>Red Ink</u>	<u>Blue Ink</u>	<u>Black Ink</u>
KS-204/KS-307 Based Yellow Base ¹	30 - 40%			
KS-204/KS-307 Based Red Base		45 - 55%		2 - 4%
KS-204/KS-307 Based Blue Base			40 - 50%	2 - 4%
KS-204/KS-307 Based Black Base				30 - 40%
KS-265 Kustom UV Forms Gel	45 - 55%	25 - 35%	35 - 45%	40 - 50%
KS-276 Kustom UV Gel ³	0 - 10%	0 - 10%	0 - 10%	0 - 10%
KS-308 Kustom High Potency. P.I.	0 - 2%	2 - 4%	2 - 4%	3 - 5%
KS-203 Kustom High Visc. Photoinitiator	2 - 4%	2 - 4%	2 - 4%	2 - 4%
KS-244 EOTMPTA	3 - 5%	3 - 5%	3 - 5%	3 - 5%

¹Use KS-307 at 5 - 10% for flow. Gelled versions of most monomers are available.

²KB-756 prevents piling and lubricates rollers to allow higher tack for better misting and improved transfer.

³Use KS-276 to improve litho properties if needed. Adjust tack to 10 - 12 @ 1200 rpm/1'.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 03/01/2016



Kustom Kure – Energy-Curable Lithographic Formulary Guide for Plastic and Metal

Flexible Plastic Ink System (static cling, vinyl, etc.)

<u>Materials</u>	<u>White Ink</u>	<u>Yellow Ink</u>	<u>Red Ink</u>	<u>Blue Ink</u>	<u>Black Ink</u>
KS-322 Vehicle with 45-55% TiO ₂	70 - 80%	---	---	---	---
KS-204/KS-307 Based Yellow Base ¹	---	30 - 40%	---	---	---
KS-204/KS-307 Based Red Base	---	---	45 - 55%	---	3 - 6%
KS-204/KS-307 Based Blue Base	---	---	---	40 - 50%	3 - 6%
KS-204/KS-307 Based Black Base	---	---	---	---	25 - 35%
KS-282 Kustom UV Gel	---	30 - 40%	20 - 30%	20 - 30%	35 - 45%
KS-214 Kustom UV Freeflow	0 - 9%	0 - 10%	0 - 10%	0 - 10%	0 - 10%
KS-203/KS-308 Photoinitiator Blend ²	0 - 0.5%	3 - 5%	4 - 7%	5 - 7%	7 - 10%
KS-210 Kustom Photoinitiator for White Inks	8 - 10%	---	---	---	---
KS-247 HDODA	1 - 3%	3 - 7%	3 - 7%	3 - 7%	3 - 7%

Rigid Plastic Ink System (Polyethylene, Polypropylene, etc.)

<u>Materials</u>	<u>White Ink</u>	<u>Yellow Ink</u>	<u>Red Ink</u>	<u>Blue Ink</u>	<u>Black Ink</u>
KS-322 Vehicle with 45-55% TiO ₂	70 - 80%	---	---	---	---
KS-204/KS-307 Based Yellow Base ¹	---	30 - 40%	---	---	---
KS-204/KS-307 Based Red Base	---	---	45 - 55%	---	3 - 6%
KS-204/KS-307 Based Blue Base	---	---	---	40 - 50%	3 - 6%
KS-204/KS-307 Based Black Base	---	---	---	---	25 - 35%
KS-369 UV Vehicle for adhesion, flexibility ³	---	25 - 35%	15 - 25%	20 - 30%	20 - 30%
KS-282 UV Gel for hardness, cure	0 - 9%	5 - 10%	5 - 10%	10 - 15%	15 - 20%
KS-203/KS-308 Photoinitiator Blend ²	0 - 0.5%	3 - 5%	4 - 7%	5 - 7%	7 - 10%
KS-210 Kustom Photoinitiator for White Inks	8 - 10%	---	---	---	---
KS-247 HDODA	1 - 3%	3 - 7%	3 - 7%	3 - 7%	3 - 7%

Since plastic film substrates vary, ask your printer to provide samples of the film in order to test adhesion. Adhesion testing should be performed on every new lot of plastic.

Note: If needed, KS-214 can be substituted as a free flow vehicle in any of these formulas.

¹Use KS-307 at 5-10% to improve flow.

²KS-308 is very potent thru cure P.I. Use only if needed in white. **Too much will cause discoloration.**

KS-203 is a lower cost P.I. Use alone in lighter colors and in combination with KS-308 in darker colors.

³If film hardness (scratch) is not acceptable with KS-369/KS-282, substitute in 5-10% of KS-357 to balance cure, hardness, and adhesion.

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 SERVICES, INC., and users should make their own tests to determine the suitability of this product for their own particular purposes. Please refer to the MSDS for additional information. DATE REVISED: 03/01/2016

Metal Decorating Ink System (aluminum, tin, etc.)

<u>Materials</u>	<u>Yellow Ink</u>	<u>Red Ink</u>	<u>Blue Ink</u>	<u>Black Ink</u>
KS-204 Based Yellow Flush or Base	30 - 40%	---	---	---
KS-204 Based Red Flush or Base	---	50 - 60%	---	3 - 6%
KS-204 Based Blue Flush or Base	---	---	40 - 50%	3 - 6%
KS-204 Based Black Base	---	---	---	25 - 35%
KS-369 UV Vehicle for adhesion, flexibility ³	10 - 20%	10 - 20%	10 - 20%	10 - 20%
KS-331 Kustom UV Freeflow	25 - 35%	20 - 30%	20 - 30%	20 - 30%
KS-203/KS-308 Photoiniator Blend ²	3 - 5%	4 - 7%	5 - 7%	7 - 10%
KS-207 TRPGDA	3 - 6%	3 - 6%	3 - 6%	3 - 6%



Since plastic film substrates vary, ask your printer to provide samples of the film in order to test adhesion. Adhesion testing should be performed on every new lot of plastic.

Note: If needed, KS-214 can be substituted as a free flow vehicle in any of these formulas.

¹Use KS-307 at 5-10% to improve flow.

²KS-308 is very potent thru cure P.I. Use only if needed in white. **Too much will cause discoloration.**

KS-203 is a lower cost P.I. Use alone in lighter colors and in combination with KS-308 in darker colors.

³If film hardness (scratch) is not acceptable with KS-369/KS-282, substitute in 5-10% of KS-357 to balance cure, hardness, and adhesion.

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 SERVICES, INC., and users should make their own tests to determine the suitability of this product for their own particular purposes. Please refer to the MSDS for additional information. DATE REVISED: 03/01/2016

Technical Data Sheet

KS-276

Kustom Kure Low Tack UV Gel Vehicle



Product Description

KS-276 is our flagship UV workhorse gel vehicle. KS-276 is a versatile energy cure vehicle system recommended for most UV/EB paste ink applications including lithographic inks, hybrid inks, letterpress inks, business form inks, carton inks, and label inks. Gel chemistry promotes sharper printing and better litho properties versus typical UV oligomers. Suitable for most paper, paperboard, and foil coated substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Excellent ink/water balance
- Good cure response
- Reduced misting and enhanced gloss without the use of dry additives
- Formulated for easy cleanup with less aggressive press washes
- Exceptional hold-out
- Low tack versus other comparable UV gel vehicles

Physical Properties

- Viscosity 700 – 1000 Poise
- Yield 6000 – 10,000 dynes/cm²
- Tack 20 – 24 @ 400 rpm/1 minute
- Specific Gravity 1.11
- Solids > 99%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 03/01/2016

Technical Data Sheet

KS-236

Gelled Fatty Acid Modified Hexa-Functional Polyester



Product Description

KS-236 properties include good pigment wetting, fast cure, and good lithographic performance. Good choice for hybrid with easy cleanup. KS-236 may have adhesion potential to some flexible plastic substrates. Typical applications include commercial sheet-fed and folding carton work on paper, paperboard and select plastic stocks. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Improves transfer properties and roller stability
- Easy cleanup properties for use in hybrid ink.
- Excellent cure response
- Excellent printability
- Reduced misting versus typical straight polyester acrylates.

Physical Properties

- Viscosity 100 – 300 Poise
- Yield 1000 – 3000 dynes/cm²
- Tack 4 – 8 @ 400 RPM @ 1 minute
- Specific Gravity 1.01
- Solids > 99%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 01/18/2016

Technical Data Sheet

KS-296

UV/Hybrid Low Tack Gel Vehicle



Product Description

KS-296 is a unique development in UV/Hybrid vehicle technology. KS-296 has a lower tack, and higher structure versus our most popular UV gel for paper, KS-276. KS-296 is specifically formulated with a higher melt resin system than traditional UV vehicles, and will hold up better to the heat and shear of today's high speed UV, and UV waterless presses. Inks formulated with KS-296 will maintain viscosity and structure to exhibit better misting and superior litho properties without the need for dry additives. KS-296 is formulated for easier cleanup on most hybrid rubber compounds. For this reason, cure response may need to be enhanced for some applications. In these cases 5-10% of KS-299 or KS-261 epoxy acrylate vehicles should be sufficient. Typical applications include commercial sheetfed and folding carton work on paper, paperboard and other substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Excellent ink/water balance
- Excellent choice for UV waterless ink
- Lowest tack, highest structured UV/Hybrid gel available
- Reduces misting and maintains viscosity without the use of dry additives
- Formulated for easy cleanup with less aggressive press washes
- Exceptional hold-out

Physical Properties

- | | |
|--------------------|-----------------------------------|
| • Viscosity | 400 – 600 Poise |
| • Yield | 4200 – 5200 dynes/cm ² |
| • Tack | 13 – 15 @ 400 rpm/1 minute |
| • Specific Gravity | 1.11 |
| • Solids | > 99% |

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months. Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 06/28/2014

Technical Data Sheet

KS-291

Kustom Kure UV Freeflow Vehicle



Product Description

KS-291 is the recommended companion freeflow vehicle for our most popular UV gel for paper, KS-276. KS-291 along with KS-276 is part of a versatile energy cure vehicle system recommended for most UV/EB paste ink applications including lithographic inks, hybrid inks, letterpress inks, business form inks, carton inks, and label inks. Suitable for most paper, paperboard, and foil coated substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Good cure response
- Excellent printability
- Excellent ink/water balance
- Reduced misting and enhanced gloss without the use of dry additives
- Formulated for easy clean up with less-aggressive press washes

Physical Properties

- | | |
|--------------------|----------------------------|
| • Viscosity | 400 – 600 Poise |
| • Tack | 24 - 28 @ 400 rpm/1 minute |
| • Specific Gravity | 1.12 |
| • Solids | > 99% |

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 03/13/2013

Technical Data Sheet

KS-299

Kustom Kure Epoxy Free Flow



Product Description

KS-299 is a low viscosity epoxy acrylate. Use KS-299 in your ink formulation to increase cure response and reduce viscosity. Recommended for lithographic inks, letterpress inks, business form inks, carton inks, and label inks. Suitable for most paper, paperboard, and some foil coated substrates. High percentages may cause brittleness in some applications and therefore is not recommended for plastic substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Epoxy cut in 40% TMPTA
- Excellent cure response
- Reduces viscosity for ease of handling

Physical Properties

- Viscosity 7500 – 8500 cps
- Specific Gravity 1.16
- Solids > 99%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Data Safety Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 03/13/2013

Technical Data Sheet

KS-265

Kustom Kure UV Forms Gel Vehicle



Product Description

KS-265 is based on proprietary epoxy chemistry. Gel chemistry promotes sharper printing and better litho properties versus typical UV oligomers. KS-265 is suitable for most UV/EB paste ink applications including lithographic inks, letterpress inks, business form inks, carton inks, and label inks. Suitable for most paper, paperboard, and foil coated substrates. Not recommended for plastic substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Excellent cure response
- Excellent printability
- Enhanced dot sharpness
- Exceptional hold-out
- Minimal misting without the use of dry additives

Physical Properties

- | | |
|--------------------|----------------------------------|
| • Viscosity | 300 – 500 Poise |
| • Yield | 800 – 1500 dynes/cm ² |
| • Tack | 7 – 9 @ 400 rpm/1 minute |
| • Specific Gravity | 1.26 |
| • Solids | > 99% |

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 03/13/2013

Technical Data Sheet

KS-383

Kustom Kure Photoinitiated UV Extender Vehicle for Paper



Product Description

KS-383 is recommended as an all-in-one extender vehicle for UV-curable lithographic inks where high performance, excellent litho properties and fast cure are desired. Minimal* or no photoinitiator is required when using KS-383, as a unique photoinitiator blend is already incorporated into the vehicle. Typical applications include paper and paperboard substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Excellent cure response
- Excellent litho properties
- Excellent printability
- Little or no photoinitiator required when formulating inks

Physical Properties

- Viscosity 500 – 800 Poise
- Tack 9 – 12 @ 400 rpm/1 minute
- Specific Gravity 1.16
- Solids 100%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Data Safety Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

*(High pigment loads and certain pigments may require additional photoinitiator. Always check ink for proper cure response.)

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 04/18/2012

Technical Data Sheet

KS-369

Kustom Kure UV Gel Vehicle for Plastic



Product Description

KS-369 exhibits excellent flexibility, with adhesion to a variety of rigid plastic substrates. KS-369 is a gel vehicle suitable for UV-curable lithographic inks, dry offset, and letterpress inks for rigid plastic. If faster cure is needed, use a combination of KS-369 and KS-285. Gel chemistry promotes sharper printing and better litho properties versus typical UV oligomers. Typical applications include printing on plastic and other non-porous substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Exceptional adhesion to a wide variety of plastics
- Excellent flexibility with minimal cross linking
- Superior holdout
- Minimal misting without the use of dry additives

Physical Properties

- Viscosity 1500 – 2000 Poise
- Yield 8000 – 12,000 dynes/cm²
- Tack 20 – 24 @ 400 rpm/1 minute
- Specific Gravity 1.08
- Solids > 99%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 03/13/2013

Technical Data Sheet

KS-230

UV Gel Vehicle for Packaging/Non-Food Contact



Product Description

KS-230 is recommended as a gel vehicle for UV/EB-curable lithographic or dry offset packaging inks. KS-230 is considered low odor and low migration and is recommended for packaging inks formulated for indirect food applications. For best results, a suitable, functional barrier substrate is typically required. Other applications include commercial sheet-fed and folding carton work on paper, paperboard, plastic cups and other plastic substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Considered low odor and low migration for food packaging applications.
- Formulated with materials from the Nestle Positive List
- Reduced misting and enhanced gloss without the use of dry additives
- Good adhesion properties
- Excellent cure response

Physical Properties

- Viscosity 850-1050 Poise
- Yield 5500-8500 dynes/cm²
- Tack 22 – 26 @ 400 rpm/1 minute
- Specific Gravity 1.06
- Solids > 99%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Data Safety Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 4/3/2015

Technical Data Sheet

KS-331

Kustom Kure UV/EB Metal Deco Vehicle



Product Description

KS-331 is formulated with proprietary chemistry to give excellent adhesion properties for metal deco applications. Typical applications include flat sheet and D & I metal substrates and can also be used to improve adhesion on various plastics. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- High viscosity vehicle for metal deco applications
- Excellent adhesion boost to a variety of plastic substrates when used at 5 – 15% levels

Physical Properties

- Viscosity 2000 - 4000 Poise
- Specific Gravity 1.08
- Solids > 99%

Suggested Starting Ink Formulary

The recommended level is 15 – 25%. Please refer to the SUGGESTED INK FORMULARY bulletin for additional starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 03/13/2013

Technical Data Sheet

KS-214

Kustom Kure UV Freeflow
Vehicle for Plastic



Product Description

KS-214 is recommended as an adhesion promoter for UV-curable lithographic and flexographic inks where high performance and good adhesion are desired. Typical applications include a variety of plastics and other non-porous substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Good cure response at 10-30% of the total ink formula by weight
- Excellent printability
- Promotes adhesion to difficult substrates

Physical Properties

- Viscosity 400 – 800 Poise
- Specific Gravity 1.08
- Solids 100%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 10/19/2008

Technical Data Sheet

KS-282

Kustom Kure UV Gel Vehicle for Plastic



Product Description

KS-282 is Gelled Chlorinated Polyester. KS-282 is recommended for UV/EB paste ink applications ideally for non-porous substrates. Use for lithographic inks, hybrid inks, letterpress, and label inks. For additional information regarding assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Gelled Chlorinated Polyester
- Excellent combination of adhesion and cure response
- Gelled vehicles reduce misting and enhanced gloss without the use of dry additives
- Exceptional adhesion to a wide variety of plastics

Physical Properties

- Viscosity 650 – 900 Poise (Laray)
- Yield Value 5,000 – 8,000 dynes/cm²
- Tack 25 – 30 @ 400 rpm/1 minute
- Specific Gravity 1.28
- Solids 100%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Certain precautions should be taken when handling this product. Please refer to the Material Data Safety Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 01/18/2016

Technical Data Sheet

KS-371

Kustom Kure UV Freeflow Vehicle for Plastic



Product Description

KS-371 is formulated specifically for adhesion to plastic. KS-371 is the free flow companion vehicle to our UV Gel vehicle for plastic, KS-369. It is recommended for UV-curable lithographic offset inks where high performance and good adhesion are desired. Typical applications include a variety of plastics and other non-porous substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- High viscosity free flow version of KS-369 Gel Vehicle for Plastic.
- Excellent flexibility
- Promotes adhesion to difficult substrates

Physical Properties

- Viscosity 1000 – 3000 Poise
- Specific Gravity 1.09
- Solids 100%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 02/20/2013

Technical Data Sheet

KS-322

UV High Pigment Load Dispersant Vehicle



Product Description

KS-322 is recommended as a higher concentrated, lower viscosity version of KS-204. KS-322 is an excellent choice for dry grinding carbon black, and other hard to wet pigments. Use in UV flexographic inks, UV inkjet inks, and offset inks. KS-322 has exhibited excellent pigment wetting capabilities, good adhesion properties, and overall lower viscosities of the finished ink. Applications include paper or non-porous substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- High pigment loading capability
- Can be used as a dispersant modifying vehicle at 10-20%
- Excellent adhesion to most plastics
- Excellent printability

Physical Properties

- Viscosity 45 – 60 Poise (Rheometer)
- Specific Gravity 1.14
- Solids > 99%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Data Safety Sheet for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to this in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information.

DATE REVISED: 01/17/2016

Technical Data Sheet

KS-204

Energy-Curable Grinding Vehicle



Product Description

KS-204 is our best pigment wetting, all purpose grinding vehicle for ENERGY-CURABLE lithographic and flexographic ink. This is proprietary chemistry with truly unique adhesion and wetting properties on all nonporous substrates, including most plastics and metal deco applications. Typical applications would also include commercial and folding carton work on paper, paperboard and other substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Excellent pigment wetting
- Excellent adhesion to all plastics and metal deco applications
- Excellent litho properties.

Physical Properties

- Viscosity 150 – 225 Poise
- Tack 7.0 – 11.0 @ 400 rpm/1 minute
- Specific Gravity 1.13
- Solids > 99%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Data Safety Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 02/01/2012

Technical Data Sheet

KS-307

Kustom Kure Low Viscosity Polyester Dispersion Vehicle



Product Description

KS-307 is Fatty Acid Modified Hexa-functional Polyester. KS-307 is recommended as an additive for flow or use to enhance flexibility and pigment wetting in place of epoxy acrylate. KS-307 has good pigment wetting, litho properties, and cure speed.

For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Excellent pigment wetting
- Good Litho Properties
- Good reactivity and low viscosity

Physical Properties

- Viscosity 65 – 85 Poise
- Specific Gravity 1.10
- Solids > 99%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 03/19/2013

Technical Data Sheet

KS-302

Kustom Kure UV Flushing and Grinding Vehicle



Product Description

KS-302 is recommended as a dispersion vehicle ideal for hybrid applications. KS-302 is a versatile energy cure vehicle recommended for most UV/EB paste ink applications including lithographic inks, hybrid inks, letterpress inks, business form inks, carton inks, and label inks. KS-302 is especially effective for hard-to-disperse pigments such as Lithol Rubine, Carbon Black and Alkali Blue, among others. Typical applications include commercial and folding carton work on paper, paperboard and other substrates. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Very effective with hard-to-disperse pigments
- Formulated for easy cleanup with less aggressive press washes, ideal for hybrid applications
- Excellent flow properties with higher viscosity
- Excellent pigment wetting

Physical Properties

- Viscosity 400 – 700 Poise
- Specific Gravity 1.11
- Solids > 99%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 03/19/2013

Technical Data Sheet

KS-308

Photoinitiator Blend



Product Description

KS-308 is a liquid photoinitiator blend, effective for flexo, litho, screen, especially recommended for darker colors and thicker films(except white)*. For better economics in lighter colors, use in combination with KS-203. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Excellent cure response especially with darker colors
- For use with all standard organic and select carbon black pigments (except white)*
- Low viscosity liquid – easy to blend into ink system
- Blend of selected photoinitiators with broad cure response

Physical Properties

- Viscosity 220 – 280 Poise (TA Rheometer)
- Specific Gravity 1.10
- Solids > 99%
- Appearance Liquid (CAUTION: Upon aging, KS-308 may start to crystallize. A simple warming of KS-308, not to exceed 130°F, will reconstitute the material safely.)

Suggested Starting Ink Formulary

KS-308 can be used at a concentration of 1-8% by weight of the total formula. KS-308 may also be used in combination with other photoinitiators. Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

*Use KS-210 for white inks

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information.

DATE REVISED: 01/17/2016

Technical Data Sheet

KS-210

Kustom Kure Flexo Photoinitiator for White Inks



Product Description

KS-210 is a balanced photoinitiator recommended specifically for use in TiO₂ pigmented systems. KS-210 can be used for most UV-curable inks including flexographic, screen, and litho. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Excellent cure response
- Non-yellowing
- For use with white pigments
- Recommended dosage is 7-10%
- Low viscosity liquid – easy to blend into ink system
- Blend of selected photoinitiators with broad cure response

Physical Properties

- Viscosity 18 – 25 sec. #2 Zahn
- Specific Gravity 1.11
- Solids > 99%

Suggested Starting Ink Formulary

KS-210 may be used in combination with other photoinitiators. Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 03/01/2016

Technical Data Sheet

KS-203

High Viscosity All-In-One Photoinitiator



Product Description

KS-203 is formulated as an all-in-one photoinitiator with the right balance of top and thru cure. Its high viscosity will not lower final ink tack or viscosity. KS-203 is recommended for use in UV-curable lithographic ink formulations (except white)* where high performance and fast cure response are desired. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Excellent cure response (balanced top- and through-cure)**
- Will not reduce the viscosity of your ink.
- For use with all standard organic and select carbon black pigments (except white)*
- Easy to incorporate into ink system
- Blend of several photoinitiators

Physical Properties

- Viscosity 1500 – 2500 Poise
- Specific Gravity 1.09
- Solids > 99%

Suggested Starting Ink Formulary

KS-203 may be used in combination with other photoinitiators. Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

With age, KS-203 may need to be remixed and or slightly heated to become homogenous. If heat is needed, always use a lined metal or stainless steel container. Reheat in a warm room or oven. If a hot plate is used, constant stirring is recommended to avoid hot spots. Do not exceed 120F during this process. Please refer to the UV Safety manual for further information.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

* Use KS-210 for white inks.

** For extremely dark, pigmented inks, a small percentage of high potency photoinitiator KS-308 may be required.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 02/20/2013

Technical Data Sheet

KS-297

Kustom Kure High Crosslinking Monomer



Product Description

KS-297 is recommended as an additive to increase cure speed and hardness in UV ink formulations without additional photoinitiator. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Increases cure speed and hardness without additional photoinitiator
- High percentages may cause brittleness and/or adhesion loss

Physical Properties

- Viscosity 100 – 200 Poise
- Specific Gravity 1.19
- Solids >99%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 10/19/2008

Technical Data Sheet

KS-388

Kustom Kure UV Silicone Additive



Product Description

KS-388 is recommended for use as a silicone additive for leveling, wetting, and lowering COF (Coefficient of Friction) in UV coating and ink systems. **KS-388** is also an effective anti-toning additive for UV Waterless inks. Dosage for Waterless Ink is 0.5-1.5%. For coating applications, **KS-388** has a recommended dosage of 0.2 – 1%; higher dosages can increase foam production. For additional information regarding assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Very effective in leveling and wetting
- Decreases COF (increases slip)
- 100% solids
- UV Waterless Ink additive to reduce Toning

Physical Properties

- | | |
|--------------------|---------------|
| • Solids | 100% |
| • Specific Gravity | 1.04 |
| • Viscosity | 250 – 350 cps |

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Data Safety Sheet for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 06/05/2015

Technical Data Sheet

KS-347

Kustom Kure Defoamer



Product Description

KS-347 is a powerful defoamer recommended for use in UV-curable coatings and overprint varnishes. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Highly effective – small amount required for desired effects
- Low viscosity liquid – easy to blend into system
- **Non-Imprintable**
- Recommended addition level – 0.1-0.5%

Physical Properties

- Specific Gravity 1.19
- Solids > 98%
- Appearance Liquid

End Use Considerations

KS-347 should be evaluated under production conditions using the actual UV system and substrate to ensure that leveling, intercoat adhesion, gloss and other performance characteristics are acceptable.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Data Safety Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 03/20/2013

Technical Data Sheet

KB-756

Mineral Oil Free Kentucky Lube



Product Description

KB-756 is a mineral oil free, high solids additive for any litho ink system that will provide lubrication of the ink on the plate and blanket cylinders. When used at a 2-5% level **Kentucky Lube** is useful in preventing piling and picking problems on press. This is especially important when printing on lighter weight papers and recycled stocks that often cause piling, linting, and hickey problems on press. Inks can be made at the desirable higher tacks with **KB-756** to maintain dot sharpness and still will NOT pick. **Kentucky Lube** will NOT adversely affect other ink properties on press or the printed sheet.

Performance Characteristics

- Very Effective in Preventing Piling
- Reduces Misting by Allowing You to Increase Tack Without Picking
- Improves Transfer
- Mineral Oil Free
- High Solids

Physical Properties

Viscosity	100-200 Poise
Solids	98 – 100%

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, INC. , 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 INC. makes no warranty of any kind, expressed or implied, including those of merchantability and fitness for particular purpose, other than that the material conforms applicable current Standard Specifications. Standard Specifications, although current at the time of publication, are subject to change without notice. Please refer to the MSDS for additional information. DATE REVISED: 01/19/2015

Technical Data Sheet

KB-147

Microtalc Anti-Misting Additive



Product Description

KB-147 is dry microtalc used as an anti-misting additive. When used at the prescribed dosage (1-2%), KB-147 will reduce misting, without adversely effecting tack or gloss. Suitable for all paste ink including oil-base and UV formulations.

Physical Properties

Appearance

White Powder

Physical State

Solid

Solubility in H2O

Insoluble

Specific Gravity

2.8

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, INC. , and users should made their own tests to determine the suitability of this product for their own particular purposes. However, because of numerous factors affecting results, KUSTOM GROUP INC. makes no warranty of any kind, expressed or implied, including those of merchantability and fitness for particular purpose, other than that the material conforms applicable current Standard Specifications. Standard Specifications, although current at the time of publication, are subject to change without notice. Please refer to the MSDS for additional information. DATE REVISED: 10/10/2012

Technical Data Sheet

KS-279

Polymerization Inhibitor



Product Description

KS-279 is a hindered amine based inhibitor and is recommended as an in-container stabilizer. It acts as an effective free radical scavenger, and helps prevent polymerization in UV-curable materials. For additional information regarding formulary assistance and applications, please contact your KUSTOM SERVICES, INC. representative.

Performance Characteristics

- Effective in-container polymerization inhibitor in a liquid form.
- Gelled Version of KS-381
- Effective free radical scavenger.
- Recommended usage is 1.0 – 2.0% by weight.

Physical Properties

- Viscosity 1 – 3 sec. (Laray Rod Only)
- Specific Gravity 1.12
- Solids >99%

Suggested Starting Ink Formulary

Please refer to the SUGGESTED INK FORMULARY bulletin for starting ink formulations. These are intended as starting formulae only. Substrate, press and other variables must be addressed by the formulator for each application.

Storage and Handling Information

Care should be taken not to expose radiation curable products to temperatures exceeding 100°F for prolonged periods of time or to direct sunlight. Storage must be in a cool, shaded, well-ventilated and dry area. To do otherwise might cause uncontrollable polymerization of the product with generation of heat. Do not store this material under an oxygen-free atmosphere. This material should not be stored for more than six (6) months.

Certain precautions should be taken when handling this product. Please refer to the Material Safety Data Sheet (MSDS) for further details. This product contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. Since irritation may not occur immediately, contact can go unnoticed. Consult the MSDS for appropriate equipment prior to using this or any other materials referred to in this Technical Data Sheet.

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 SERVICES, INC., 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 SERVICES, INC. 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 MSDS for additional information. DATE REVISED: 06/25/2013