

LK-ASF SS TEXTILE FINISHING FLUIDS

LK- ASF SS TEXTILE FINISHING FLUIDS are non-reactive amino modified silicone fluids that give excellent **surface smoothness** along with softness and durability.

FEATURES

- Gives an excellent surface smoothness and softness with a unique handle
- Resistant to washing and abrasion
- Non-Reactive
- Readily form emulsions that are dilution stable
- Amino functional silicone
- Compatible with other finishing agents
- 100% active
- Emulsion stable in up to 600-ppm hard water and 0.1% electrolyte.
- Antistatic
- Essentially Non-Yellowing

APPLICATIONS

LK- ASF SS non-reactive fluids can be easily converted into emulsions by using non-ionic emulsifiers. These emulsions can be used in textiles & leather to generate surface smoothness with a soft handle, suppleness & silky finish that is capable of withstanding repeated washing cycles. They are especially useful for cottons, saris, suiting, etc to impart softness and body to the fabric. Choice of fluid depends on type of softness required and colorations.

PRODUCT SELECTION GUIDE

The best surface smoothness and softness is achieved by **LK-ASF-SS 90**, which also is perfectly non-yellowing and must always be used in the macro emulsion form. For better inner softness and a silkier feel **LK-ASF-SS 82** is recommended. If inner softness is desired but yellowing is a concern, **LK-ASF-SS 130** is advised for use. For surface smoothness and bounce **LK ASF SS 20** is recommended.

PRODUCT CHART¹

Product Name	Specific Gravity	Refractive Index	Amine Value (mg KOH/gm product)	Viscosity 25° C in cps (Brookfield Viscometer)	Appearance	Clarity	Volatile Content (110° C /1 hr)
LK ASF SS 82	0.97	1.408	15.5	6000	Clear to slight hazy	Clear-slightly hazy liquid	<12%
LK ASF SS 90	0.97	1.408	8.5	12500	Clear to slight hazy		<4%
LK ASF SS 130	0.97	1.408	15.5	3300	Clear to slight hazy		<6%
LK ASF SS 20	0.97	1.408	20	1000	Clear to slight hazy		<10 %

¹ Typical Values – Should not be considered as specifications.

SUGGESTED APPLICATION METHOD AND FORMULATION

Both macro and micro-emulsions are recommended for usage and are suitable for padding. The most suitable diluents for the micro emulsion are Water.

Suggested macro-emulsification process for

LK ASF SS 82/90/130/20

- 1. LK-906 : 10 %
- 2. LK-ASF SS 82/90/130/20 : 10 %
- 3. Acetic Acid (98%) : 0.2 %
- 4. Water : 80 %

(*Maintain emulsion mixture temperature below 50°C)

Charge LK-906 non-ionic emulsifier in suitable mixer (preferably with hanging saw tooth blade agitator)

Mix Acetic Acid and stir for 10 minutes.

Add LK-ASF-SS 82/90/130 and stir for 60 minutes.

Add Water and stir for 90 minutes or until homogenous product is obtained. This gives a 20 ± 2 % micro emulsion. Filter if necessary.

*LK-ASF-SS 90 gives a slightly hazy to translucent emulsion.

Suggested micro-emulsification process for

LK ASF SS 82/130:

- 1. LK-903 : 8 %
- 2. LK-ASF SS 82/130/20: 12 %
- 3. Acetic Acid (98%) : 0.27 %
- 4. Water-1 : 2 %
- 5. Water-2 : 78 %

(*Maintain emulsion mixture temperature below 50°C)

Charge LK-903 non-ionic emulsifier in suitable mixer (preferably with hanging saw tooth blade agitator)

Start mixing and add Water -1 and Acetic Acid– 1. Stir for 10 minutes

Add LK-ASF-SS 18/20/55 and stir for 60 minutes ensuring there is no oily build up on the wall.

Add Water – 2 and stir for 90 minutes. Filter if necessary. This gives a 20 ± 2 % micro emulsion. *LK-ASF-SS 130 gives a translucent micro emulsion.

Padding: An amount equivalent to 0.2 to 2 grams per liter active LK ASF fluid. 1 liter of 20% micro emulsion in 100 liters water gives 2 grams solids per liter. (1-gram active if above macro emulsification is used and 1.2 grams active if above micro emulsification process is used) This should be added to the padding bath depending on the fabric and feel desired for 15-20 minutes. Fabric should then be dried and cured at 160-180°C for 40-60 seconds.

PRODUCT PROPERTIES

Product Name	Feel	Non-Yellowing	Body	Softness	Smoothness	Durability	Substrates ²
LK ASF SS 82	Surface smoothness with inner softness	****	**	****	****	***	C, V, CV, B
LK ASF SS 90	High Surface smoothness	***	***	****	*****	***	C, V, B
LK ASF SS 130	Surface smoothness with inner softness	****	**	****	****	***	C, V, CV, B
LK ASF SS 20	Surface smoothness with bounce.	****	***	*****	*****	***	C, V, CV, B

Ratings are relative to each other and other ELKAY Textile finishing fluids (*****-Best) (*-worst)

2(C-Cotton, V-Viscose, CV-Cotton/Viscose, B-Blends)

PACKING

50 kg H.D.P.E. carboys and 200-kg drums.

SHELF LIFE

Nine months in the original container.

STORAGE & HANDLING

It is recommended that normal safety precautions (hand gloves & safety goggles) be taken while handling the product. The material should be stored in original ELKAY containers in a cool place and protected from direct exposure to sunlight.

The information provided to the customers in this data sheet is intended as a guideline and is provided in good faith. The Information is believed to be accurate. Changes may occur from system to system as methods of use and conditions are beyond our control, hence **users are requested to evaluate the recommendations before actual application to get desired performance.**

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Internal References PS/Ref/03/01 DX30301