



SPECIALITIES

THREAD LUBRICANTS

SILWA®

www.graf-chemicals.com

SILWA® SPECIALITIES

– the perfect solution for finishing your technical threads, sewing threads and embroidery yarns



Silwa® specialities are highly effective processing agents which are designed for technical threads, sewing threads and embroidery yarns and can be used with different application techniques.

Silwa® specialities are a very effective solution because they provide a wide range of functions.

	SILWA® BOND FIL	SILWA® BOND 1019	SILWA® BOND CO	SILWA® GT 1006	SILWA® WR 305 N	SILWA® HYBRID CONC.
PRODUCT PROPERTIES						
Function	water based bonding agent for filament threads	water based bonding agent for filament threads and technical threads	water based bonding and glazing agent for Cotton and PES/CO threads	water repellent agent and lubricant for sewing threads, based on C6 technology	PFC free water repellent agent and lubricant for sewing threads	PFC free water repellent agent for sewing threads
Chemical characteristics	water based formulation of different polymers	water based formulation of different polymers	silicones, waxes, special polymers and additives	water-based dispersion of fluorocarbon resins, silicones, waxes and antistatic emulsifiers	fluoro free hybrid polymer, water-based dispersion, silicones, waxes and antistatic emulsifiers	water-based fluoro free dispersion of different copolymers
PRODUCT SPECIFICATIONS						
Appearance	white, milky liquid	white, milky liquid	white, milky liquid	milky liquid	milky liquid	milky liquid
Ionic-state	anionic	anionic	slightly cationic	cationic	--	--
pH-value	6	6	5	4	4	8
Viscosity mPas (at 20°C)	< 100	< 100	< 1,000 < 2,500	<100	< 100	< 80
Application	bonding machine	bonding machine	bonding machine with brushes	graf Single Lub cold applicator or cold lick roll system	graf Single Lub cold applicator or cold lick roll system	graf Single Lub cold applicator or cold lick roll system
Suitable for	the bonding of PES and PA filament threads and technical threads	the bonding of PES and PA filament threads and technical threads	Cotton and PES/CO core threads	all kind of threads	all kind of threads	all kind of threads
Benefits	<ul style="list-style-type: none"> environmentally friendly easily dilutable with water easy to handle provides a soft handle 	<ul style="list-style-type: none"> environmentally friendly easily dilutable with water easy to handle provides a soft and dry handle 	<ul style="list-style-type: none"> produces a smooth, glossy surface no hairiness exhibits good friction and sewability 	<ul style="list-style-type: none"> provides the thread with excellent water repellent effects exhibits good friction and sewability 	<ul style="list-style-type: none"> provides the thread with excellent water repellent effects exhibits good friction and sewability 	<ul style="list-style-type: none"> provides the bonded thread with water repellent effects easily dilutable with water easy to handle

SILWA® – SPECIALITY PRODUCTS

Functions:

- water repellent effect in combination with excellent sewability, ALL-IN ONE
- FDA approval + Food contact status Germany
- excellent antistatic properties
- constant low friction values and best stick-slip properties
- excellent sewability, with outstanding heat protection
- excellent seam construction
- environmentally friendly water based bonding agent
- bonding effect in combination with water repellent effect
- reduce hairy fibre surface, produce a smooth and glossy surface
- waxed thread surface for individual effects and functions



Silwa® specialities are sophisticated formulations for sewing threads and embroidery yarns based on high quality silicone oils, paraffin wax, softeners and special functional chemicals. In combination with our in-house developed emulsifier systems and our specialised production method you are assured the latest, state of the art technology.

	TEX-LUB NSP	SILWA® WAX KL-G	SILWA® WAX SB-C	SILWA® KL 30	SILWA® TL 100 FDA	SILWA® NSP-CA FDA
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PRODUCT PROPERTIES

Function	coining and warp oil for threads and yarns; silicon free sewing thread lubricant	paraffin wax finish	paraffin wax finish	special waterbased paraffin wax emulsion to provide a sticky surface	Food contact status FDA, Germany and USA	Food contact status FDA and USA / Silicon and paraffin wax free finish für sewing threads
Chemical characteristics	water free compound of fatty acid esters and special additives	ductile microcrystalline waxes, solid	ductile microcrystalline waxes, solid	special waterbased emulsion of microcrystalline paraffin waxes	water-free formulation of special silicones, waxes and additives with antistatic properties	compound of fatty acid esters and special additives with antistatic properties

PRODUCT SPECIFICATIONS

Appearance	yellow, clear liquid	white solid, sticky	slightly yellowish solid	white milky, liquid	milky white oil	yellow clear liquid
Ionic-state	anionic	--	--	--	non ionic state	anionic
pH-value	--	--	--	--	--	--
Viscosity mPas (at 20°C)	< 50	10 - 15 (100° C)	10 - 16 (100°C)	< 200	< 1000	< 50
Application	graf Single Lub cold applicator or cold lick roll system	waxing machine	waxing machine	waxing machine or at winding machines with the appropriate application system	during winding with graf application system or cold lick roll system	during winding with graf application system or cold lick roll system
Suitable for	the finishing of undyed and dyed yarns and threads	all kind of threads	all kind of threads	all kind of threads, specially for cocoons and underthread bobbins	all types of threads and embroidery yarns	all types of threads and embroidery yarns
Benefits	<ul style="list-style-type: none"> • provides excellent antistatic properties • exhibits good friction • biodegradable • can easily removed from the yarn by rinsing with cold water 	<ul style="list-style-type: none"> • produces a sticky, soft surface • penetration 40 - 45 mm • FDA approval 	<ul style="list-style-type: none"> • produces a soft surface • penetration 25 - 45 mm • FDA approval 	<ul style="list-style-type: none"> • produces a slightly, sticky surface 	<ul style="list-style-type: none"> • exhibits very good friction values and sewability • provides good anti-static properties • FDA, Germany and EU food contact status 	<ul style="list-style-type: none"> • silicone and paraffin wax free lubricant, i. e. for automotive industry • exhibits good friction and anti-static properties • FDA and EU food contact status • GOTS approval

The data presented in this brochure are in accordance with the present state of our knowledge and shall inform about our products and their possibilities of application. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose.

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