POLYAVIN EFA

Character	Lubricant for sewing and embroidery threads made of all fibre types
Chemical Character	Synergetic silicone mixture of special lubricants and antistatic agents
Appearance	Colourless to beige, pumpable emulsion
Active Content	Approx. 45 %
Ionic Character	Cationic
pH-Value of a 10 % Solution	Approx. pH 4.0
Specific Weight at 20 °C	Approx. 1.0 g/cm^3
Stabilities	POLYAVIN EFA is sufficiently stable to hard water, weak acids, alkalis and electrolytes at room temperature. POLYAVIN EFA is very sensitive to frost. After the impact of temperatures around the freezing point irreversible changes will occur.
Storability	If stored properly in closed original containers, POLYAVIN EFA will hold for at least 12 months.

The above given values are product describing data. Please consult the 'delivery specification' for binding product specifications. Further data about product properties, toxicological, ecological data as well as data relevant to safety can be found in the safety data sheet.

Properties

POLYAVIN EFA provides the following properties:

- Excellent and constant coefficient of friction
- Ensures a good sewability of the thread (no stick/slip effect)
- Excellent heat protection, especially on synthetic fibres and high performance sewing and embroidery machines
- Highest exhaust rate and homogeneous distribution within the complete bobbin cross-section
- Antistatic effect
- Universally applicable on all kind of fibres
- Simple application and handling of product

Application Technique

Diluting Instructions

POLYAVIN EFA can be diluted to any desired concentration with cold or warm water.

Application Fields

POLYAVIN EFA is used as lubricant for sewing and embroidery yarns made of all fibre types.
Treatment is done after dyeing and rinsing in a fresh bath directly in the dyeing apparatus.

Recipe Proposals

Standard application amounts depending on article and fibre type

Viscose embroidery thread:	1.0 - 3.0 %	POLYAVIN EFA
Polyester embroidery thread:	3.0 - 5.0 %	POLYAVIN EFA
Cotton sewing thread:	3.0 - 5.0 %	POLYAVIN EFA
Polyester sewing thread:	5.0 - 8.0 %	POLYAVIN EFA

These are standard amounts which must be adjusted to the induvial thread types.

pH-values for the application process

Natural fibres	pH 5.0 – 5.5
Synthetic fibres	pH 6.0 – 6.5

Recommendation for pump circulation

4 min outside/inside – 2 min inside/outside

Application procedure

Initial temperature 30 – 35°C.
Add acetic acid to adjust the required pH value.
Treat for approx. 5 min.
Pump the treatment bath then back into the side tank.
Add POLYAVIN EFA.
Heat up with gradient 1.5 – 2.0°C* / min. to 60 – 80°C*.
Treat for 10 - 20 min.
Drain and dry the cheese cones under the usual conditions (e.g. HF dryer)

*We recommend a higher temperature for synthetic fibres; the gradient depends on the winding density and thread quality.

Recommendation for threads dyed with reactive or direct dyes

A water-clear bath exhaustion on cotton shares dyed with reactive or direct dyes can only be achieved with POLYAVIN EFA if the cationic after treatment is carried out after the lubrication. An optimal finishing of sewing and embroidery threads together with very good fastness levels are achieved with this one-bath two-step process.

Stripping method

If for some reason it is necessary to strip the lubrication, we recommend the following method.

3.0 g/l FELOSAN FOX or FELOSN RG-N
0.5 g/l soda calc.
0.5 g/l HEPTOL SF4

20 min at 80 °C
rinse hot and cold

We reserve the right to modify the product and technical leaflet.

Our department for applied technique is always at your service for further information and advice.

Edition: May 2021
CHT Germany GmbH
Postfach 12 80, 72002 Tübingen, Bismarckstraße 102, 72072 Tübingen, Germany
Telephone: 07071/154-0, Fax: 07071/154-290, Email: info@cht.com, Homepage: www.cht.com