

GENERAL INFORMATION

Our versatile product range for textile formulations includes specialty silicones as well as numerous aqueous emulsions for high-quality functional textile finishes and effects.

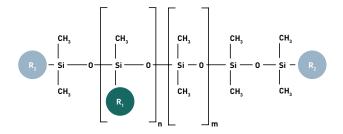
APPLICATION FIELDS

When finishing textiles, softeners are of central importance, as they give the material the desired handle or simplify subsequent processes.

Our additives for textile auxiliaries support, for instance:

- Hydrophilicity
- Water repellency
- Softness
- Non-iron properties
- Rub fastness
- Abrasion resistance
- Improved sewability

SILICONE CHEMISTRIES



R₁: Modifikation

- Mono amino
- Diamino
- Amino-amido
- Sterically hindered amines
- Polyether
- Alkane
- Epoxy

R_a: End Group

- Methyl
- Methoxy
- Ethoxy
- Alkyl
- Amino
- ▶ OH

PRODUCT OVERVIEW

HANSA AS

Aminosiloxane fluids as concentrated softeners for all fibertypes

HANSA ASE

Aminosiloxane emulsions as ready-to-use softener solution for all fiber types

HANSA ASR

Reactive amino-functional polysiloxanes to achieve a permanent soft handle

HANSA ASM

Amino-modified polysiloxanes to produce permanently hydrophilic softeners with a positive influence on the elasticity of knitted fabrics

HANSA SQ

Quaternary organomodified siloxanes show a very soft handle, stability, and outstanding hydrophilicity

HANSA SP

Polyether-modified siloxanes create a smooth handle with improved hydrophilicity

HANSA ESE

Reactive epoxy-modified polysiloxanes to improve wash resistance and elasticity

HANSA E

Aqueous wax emulsions based on HDPE, FT, or paraffin to increase abrasion resistance, handle, and water repellency

CHT PORTFOLIO OF SOFTENERS

AMINO SILOXANE FLUIDS

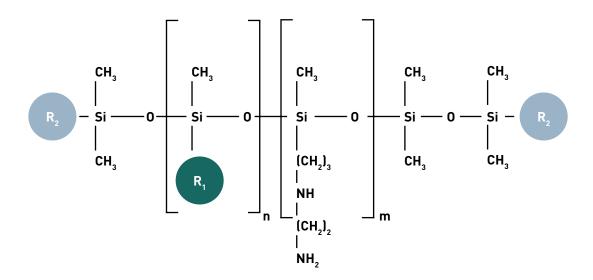
| | ACTIVE CONTENT | SOFTNESS | WHITENESS | SHEAR STABILITY |
|-----------------|----------------|----------|-----------|-----------------|
| HANSA ASR 7045 | 100% | ••• | - | • • • |
| HANSA AS 8040 D | 100% | • • • | • • | • |
| HANSA AS 8060 D | 100% | • • | • | • |

HANSA ASR 7045

is a reactive softener that improves the technological features of fabrics (crease recovery, abrasion resistance, edge tearing resistance).

HANSA AS 8040 D and HANSA AS 8060 D

are diamino-modified polysiloxanes for all kind of fibers. These textile softeners can be easily formulated to water-based micro & macro emulsions.



AMINO SILOXANE EMULSIONS

| | ACTIVE CONTENT | SOFTNESS | WHITENESS | SHEAR STABILITY |
|------------------|----------------|----------|-----------|-----------------|
| HANSA ASE 8645 D | 40% | ••• | • • | • |
| HANSA ASE 8660 D | 40 % | • • | - | • • |

HANSA ASE 8645 D and HANSA ASE 8660 D

are the corresponding ready-to-use emulsions with simplified incorporation and excellent dilution stability.

SILICONE QUATS

| | ACTIVE CONTENT | SOFTNESS | WHITENESS | SHEAR STABILITY |
|-----------------|----------------|----------|-----------|-----------------|
| HANSA SQ 2050D | 100% | ••• | • • | • • • |
| HANSA SQ 2070D | 100% | ••• | • • | ••• |
| HANSA SQE 2270D | 75% | ••• | • • | ••• |

The new generation of silicone softeners are silicone quats that have no longer the disadvantages of conventional amino siloxanes. These products are much more hydrophilic, resistance to shear, and pH stable in a wide range from pH 2 to pH 11.

$$\begin{array}{c|c} CH_3 & CH_3 \\ \hline \\ R_2 & -N \overset{\bigoplus}{\oplus} Z \overset{\longrightarrow}{\longrightarrow} Si \overset{\longrightarrow}{\longrightarrow} 0 \overset{\longleftarrow}{\longrightarrow} Si \overset{\longrightarrow}{\longrightarrow} Z \overset{\longrightarrow}{\longrightarrow} N \overset{\bigoplus}{\longrightarrow} R_2$$

$$CH_3 & CH_3 & CH_3 & CH_3 \\ \hline \\ CH_3 & CH_3 & CH_3 & CH_3 \\ \hline \end{array}$$

SILICONE POLYETHERS

| | ACTIVE CONTENT | SOFTNESS | WHITENESS | SHEAR STABILITY |
|----------------|----------------|----------|-----------|-----------------|
| HANSA SP 1010 | 100% | • | • • • | ••• |
| HANSA SP 1030 | 100% | • • | • • • | • • |
| HANSA ASM 9270 | 45 % | • • | • | • |

Silicone polyethers can be applied universally due to their nonionic, hydrophilic character.

$$\begin{array}{c}
CH_{3} \\
Si \\
CH_{3}
\end{array}$$

$$\begin{array}{c}
CH_{3} \\
CH_{3}
\end{array}$$

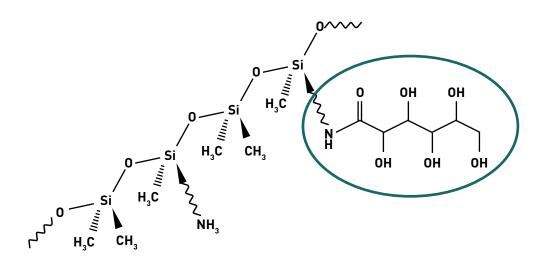
CHT PORTFOLIO OF SOFTENERS

SPECIAL SILICONES

| | ACTIVE CONTENT | SOFTNESS | WHITENESS | SHEAR STABILITY |
|-----------------|----------------|----------|-----------|-----------------|
| HANSA ASM 9020D | 100% | • • | ••• | • • |
| HANSA ASM 9070 | 76 % | ••• | • • | ••• |
| HANSA SWM 9640 | 37% | • • | - | • • |

HANSA ASM 9020D

is a sugar-modified softener with high compatibility in a broad surfactant/pH-range designed for resin finishing (easy care). This diamino functional polysiloxane provides a permanent hydrophilic softness due to its reactivity.



HANSA ASM 9070

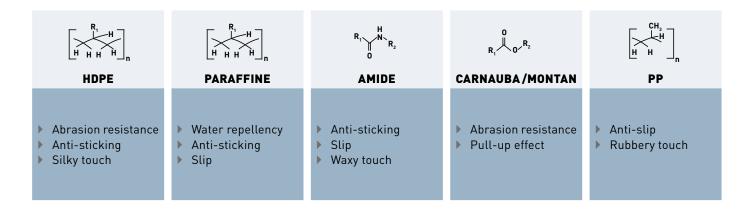
is an organo-modified polysiloxane with hydrophilic properties, which improves the sewability without yellowing on white articles. It has a positive influence on the elasticity of knits and can be used for finishing garments.

HANSA SWM 9640

is an alkyl-modified amino siloxane with a very good water repellency due to its alkyl chain modification.

CHT PORTFOLIO OF SOFTENERS

WAX EMULSIONS



| | ACTIVE CONTENT | IONIC CHARACTER | MELTING RANGE | CHEMISTRY |
|-------------|----------------|---------------------|---------------|---------------|
| HANSA E-382 | 40 % | non-ionic | 105 – 130°C | PE / FT |
| HANSA E-388 | 30 % | non-ionic / anionic | ~ 92°C | PE / Paraffin |
| HANSA E-845 | 40 % | non-ionic | ~ 135°C | HDPE |
| HANSA E-874 | 30 % | cationic | ~ 125°C | HDPE |

HANSA E-382

is used as finishing agent to impart a silky touch on textiles made from cellulosic & synthetic fibers, wool and their blends.

HANSA E-388

gives water repellency, wet rub resistance, and softness to textiles.

HANSA E-845

increases the crease recovery, abrasion resistance, sewability, slip, and softness of textiles.

HANSA E-874

shows an excellent adhesion on textile fibers due to its cationic character, improves the abrasion resistance, and increases the softness of textile articles.



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