

WACKER® EAF 300

Silicone Fluid Emulsions, functional

WACKER® EAF 300 is a general purpose, low cost low molecular weight reactive aminoethylaminopropyl fluid. Imparts a very soft hand with normal yellowing characteristics associated with amino silicones.

Technical data

General Characteristics

Property	Condition	Value	Method
Appearance	-	Clear liquid	-
Amine number/Amine Value	-	0.30/17	-
Non volatile	-	> 95 %	-
Viscosity, dynamic	-	800 - 1800 mPa·s	-

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Application details

WACKER® EAF 300 is particularly suitable as an active substance in softener formulations for the impregnation of fibers and textiles. WACKER® EAF 300 imparts a very soft, drapable, and elastic handle to woven and knitted fabrics. WACKER® EAF 300 is considered to be the best softening agent for cotton woven and knit fabrics made of cotton or cotton/PES blends. WACKER® EAF 300 improves the wash-and-wear properties and the crease recovery angle, sewability and tear strength and reduces abrasion loss. The effects are fast to washing and dry cleaning.

WACKER® EAF 300 has very little effect on the degree of white in a softener formulation when usual application conditions are adhered to. As a rule, no adverse effect on the shade or color fastness properties of colored goods is observed.

As part of formulations used as fill fiber finish WACKER® EAF 300 imparts excellent slickness and resilience to the fiber.

Processing

WACKER® EAF 300 can be applied neat, from solution, or emulsion. Suitable solvents are aliphatic and aromatic hydrocarbons, chlorinated hydrocarbons, esters, higher alcohols, and ketones.

Most textile processes are water based. Hence WACKER® EAF 300 is mainly applied from emulsion. WACKER® EAF 300 is suitable for the formulation of micro emulsions and macro emulsions.

Emulsions made with WACKER® EAF 300 are diluted to the optimum concentration for the specific fabric. Application can be done by padding or exhaustion. WACKER® EAF 300 can be utilized as the active substance in softener emulsions or in combination with other components, e.g. paraffin waxes, organic softeners, etc. Compatibility of the components has to be checked in each individual case.

Typical Recipe

Microemulsion

Raw materials

1. WACKER® EAF 300 23.00%
2. Tridecyl alcohol 6 EO 04.60%
3. Tridecyl alcohol 9 EO 02.40%
4. Acetic acid 00.25%
5. Water 1 10.00%
6. Water 2 20.00%
7. Water 3 44.65%
8. Biocide 00.10%
9. Water 4 05.00%]

It is recommended to use a tank with a sweep agitator and a high shear mixer. Temperature should be kept at 15-30 °C.

Procedure

1. Charge 1 and start sweep.
2. Charge 2, 3, and 4. Mix well for 10 minutes.
3. Start high shear mixer and slowly charge 5. Emulsion should go to a gel phase at this point. Mix 10 minutes.
4. Charge 6 slowly. Emulsion should come out of the gel phase. Mix 10 minutes.
5. Charge 7 and stop high shear mixer.
6. Charge 8 and 9. Mix until well blended.

Packaging and storage

Storage

The "Best use before end date" of each batch is shown on the Certificate of Analysis. Storage beyond the date specified on the Certificate of Analysis does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

For specific information regarding safe handling of this material, please refer to the Safety Data Sheet.

QR Code WACKER® EAF 300



For technical, quality or product safety questions, please contact:

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