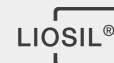


# LIOSIL<sup>®</sup> FC 228 E



## Silicone Fluid Emulsions, functional

LIOSIL<sup>®</sup> FC 228 E is a nonionic macro emulsion of a reactive, aminofunctional silicone fluid, especially for fabric softeners.

## Technical data

### General Characteristics

Property	Condition	Value	Method
pH	-	approx. 6	Indicator strips
Emulsifier type	-	nonionic	-
Solid content	-	approx. 40 %	Microwave oven
Appearance	-	milky, white	-
Ionogeneity	-	Nonionic	-

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.

## Applications

- Protect & Care

## Application details

LIOSIL® FC 228 E is combined with conventional fabric softeners and improves the properties of the fabric softeners.

LIOSIL® FC 228 E is easy to mix with fabric softeners.

LIOSIL® FC 228 E improves the softening efficacy of fabric softeners and the fabrics get a significant softer and pleasant touch. With LIOSIL® FC 228 E the hydrophilicity is increased. Additionally LIOSIL® FC 228 E reduces the friction forces of the iron and therefore the ironing properties are improved significantly.

## Processing

Preferably LIOSIL® FC 228 E is mixed into the fabric softener at the end of the formulation process by gently stirring.

Example for a fabric softener with LIOSIL® FC 228 E:

- 20,0 parts esterquat, e.g. Stepantex VK 90 (50°C) are poured slowly into
- 77,6 parts demineralized water (50°C) while stirring until the mixture is homogenous.
- 0,4 parts CaCl<sup>2</sup> solution (25%) are added q.s. perfume, dye, preservative are added
- 2 parts LIOSIL® FC 228 E are mixed while stirring

Dosage recommendation: Ca. 1 - 3 % LIOSIL® FC 228 E in the fabric softener formulation

The dosage of LIOSIL® FC 228 E in the fabric softener depends on the expected effects.

The level of organic softener can be reduced in favor of LIOSIL® FC 228 E.

## Packaging and storage

### Storage

The 'Best use before end' date of each batch is shown on the product label.

Storage beyond the date specified on the label 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.

## Additional information

The pH value shown in the certificate of analysis is that of a freshly produced product. It is well known that during storage of the material the pH can slightly increase. This does not have a negative impact onto product quality.

Stirr always well before use.

## Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site <http://www.wacker.com>.

## QR Code LIOSIL® FC 228 E



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

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The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does 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 product for a particular purpose.