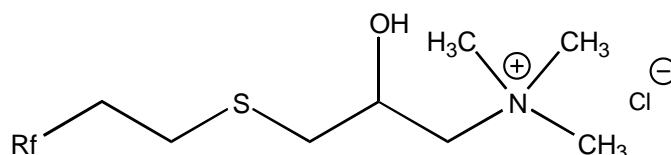


# Masurf<sup>®</sup> FS-1620



## Fluoroaliphatic Quaternary Ammonium Fluorosurfactant

### Overview

MASURF FS-1620 is characterized as a 20% active fluoroaliphatic quaternary ammonium fluorosurfactant in an aqueous solution. With typical use levels of 50-500ppm, MASURF FS-1620 is effective at very low concentrations, and together with traditional hydrocarbon surfactants, can contribute properties not possible with either material alone.

As a cationic surfactant, MASURF FS-1620 is a superior surface tension and interfacial tension reduction agent with substantive surface properties similar to alkyl quaternaries. Use FS-1620 in **Personal Care** products, **Specialty Cleaners and Conditioners**, **Deodorizers**, and **Surface Treatment** applications for improved wetting performance with unique residual surface modification and protection.

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**INCI Name: C4-18 Perfluoroalkylethyl Thiohydroxypropyltrimonium Chloride**

### Typical Properties

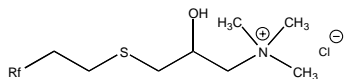
Physical form .....	Light yellow liquid, w/mild odor
Actives content % .....	19 wt% minimum
Aqueous surface tension @25°C dynes/cm.....	30.5@0.001%, 22.0@0.1%, 21.0 lowest
Interfacial tension (0.1%aq./cyclohexane).....	10.2 dynes/cm
Specific gravity @25°C.....	1.06±0.04
pH .....	6.0±1.5
Viscosity @25°C.....	<100 cps
Boiling point .....	100°C
Storage .....	Store above 32°F and below 100°F

### Handling Information

Refer to the Material Safety Data Sheet (MSDS) available from Mason Chemical Company for information on the safe use, handling and disposal of this product.

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# Masurf<sup>®</sup> FS-1620



Masurf FS-1620 is a 20% active fluoroaliphatic quaternary ammonium fluorosurfactant in an aqueous solution. FS-1620 is an effective wetting and interfacial tension reducing agent. The formulation below illustrates this effect.

## Moisturizing Skin Lotion

Ingredient	Wt%
Water.....	to 100.00
<b>Maquat SC1632</b> .....	5.0
Propylene glycol.....	2.0
<b>Masurf LL</b> .....	2.0
<b>Masurf FS-1620</b> .....	0.5
Petrolatum.....	1.0
Titanium dioxide.....	0.2
Dye, Fragrance.....	q.s.
<b>Enhansys M-100</b> .....	0.5

### Notes:

Heat water to 150-160°F (65-70°C). With sufficient agitation, add SC1632 to form a uniform dispersion. Adjust pH w/Citric acid to 5-6. Cool to room temperature, adding remaining ingredients.

Self emulsifying Maquat SC1632 contributes conditioning properties, with Masurf LL contributing silky skin feel, and Masurf FS-1620 improving the flow and feel of the product. Enhansys M-100 contributes moisturization while eliminating the need for preservatives.

### Masurf FS-Fluorosurfactant evaluation guidelines-

Masurf FS-Fluorosurfactants are effective at very low concentrations, typically 50-500 ppm, and can act synergistically with hydrocarbon and/or silicone surfactants. Evaluate in aqueous formulations at 0.1% active Masurf FS-Fluorosurfactant initially, then optimize by successively reducing the FS concentration by ½.

### US TOXIC SUBSTANCES CONTROL ACT/INVENTORY STATUS

Complies with the requirements of the following chemical inventories: US (TSCA), Canada (DSL), Korea (ECL), ASIA-PAC.

Masurf FS-Fluorosurfactants and Masurf FP-Fluoropolymers do not contain PFOS. Masurf FS and FP products are manufactured with telomerization process fluoroaliphatic intermediates that do not contain, release or have been shown to degrade to perfluorooctane sulfonate (PFOS).

*\*Fluorad is a Registered Trademark of the 3M Company, \*\* Zonyl is a Registered Trademark of DuPont*