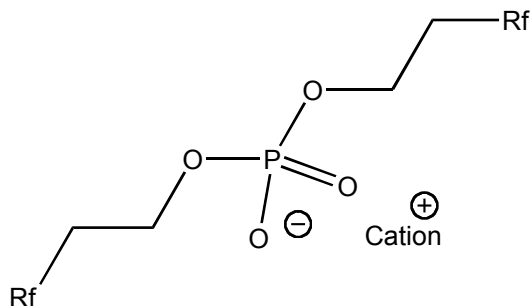


# Masurf<sup>®</sup> AF-Series



## Optimized Fluorosurfactant for Alcohol Foaming

### Overview

MASURF<sup>®</sup> AF-Series products are Perfluoroalkylethyl phosphate salts optimized for foaming high concentrations of lower aliphatic alcohols and polar organic solvents in water. Masurf AF-Series products are effective foaming agents for lower aliphatic alcohols such as methanol, ethanol and propanol, polar organic solvents such as acetone, ethyleneglycol monobutyl ether, and mixtures of polar organic solvents such as isopropyl acetate.

Use MASURF AF-Series products as foaming surfactants in Personal Care Products such as foamable hand sanitizers, shampoos, personal cleansers (such as shower or bath oil foams, and other foamable soaps), brushless shave creams, sunscreens, make-up removers, analgesic rubs, and antiperspirants. MASURF AF-Series products also find used in industrial fields such as coatings, oilfield (foaming 80% methanol solutions), material finishes, paints, foam insulation, foam containers, and foam packaging products.

### Typical Properties

Physical form.....	Tan dispersions, to clear solutions
Active content.....	15-30 wt%
Cation counter-ion.....	Ammonia, Diethanolamine, others
Carrier.....	Water, methanol, ethanol, others

Current products:

Masurf AF-115DE: **15%** active, **Diethanolamine** salt, in Water/**E**thanol

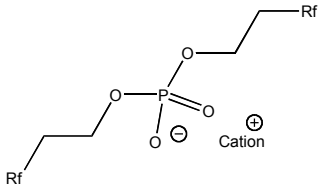
Masurf AF-115AE: **15%** active, **Ammonium** salt, in Water/**E**thanol

### 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® AF-series



Nobac® E Instant Foam Hand Sanitizer is a formulation that features Masurf AF-115DE, a Patent-Pending ingredient optimized for foaming aqueous polar organic solvents. The formulation below illustrates the unique properties that can be achieved with Masurf AF-series ingredients. In this example, Nobac E represents an easy to process product that is non-greasy, conditioning and moisturizing, that leaves the skin with a soft refreshing afterfeel, delivered in a pleasing foam.

Masurf AF-115DE: 15% active, Diethanolamine salt, in Water/Ethanol

## Formula and Mixing Instructions from Nobac® E

Ingredient:	Wt. %
Water .....	to 100.0
Ethyl Alcohol .....	62.0
<b>Masurf AF-115E</b> .....	5.00
<b>Masurf G-2C</b> .....	0.10
Dye, Fragrance .....	q.s.

### Procedure:

Charge ingredients, mix until homogeneous. QC and package.

### INCI Names:

**Masurf AF-115E:** DEA-C8-18

Perfluoroalkylethyl Phosphate

**Masurf G-2C:** Glycereth-2 Cocoate

### 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 0.1-0.5% active Masurf FS-Fluorosurfactant initially, then optimize by successively reducing the FS concentration by \_.

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).