



# Thetacare™ AFP-50

Polymeric alcohol foaming agent

## Overview

- Thetacare AFP-50 is a polymeric foaming agent with 33% actives in ethanol which has been optimized for foaming aqueous alcoholic solutions
- The product provides stable foam from both pressurized and non-pressurized dispenser application of aqueous alcoholic solutions
- Use for foaming aqueous alcoholic solutions in the physiologically recognized effective range of 60-75% ethanol or mix of lower aliphatic alcohols
- Easy to process cosmetic ingredient that conditions the skin when used in alcohol-based hand sanitizers, is non-sticky and non-greasy, and leaves the skin with a soft refreshing after-feel
- Produces rich stable foam that spreads cleanly on the skin for a fast-drying, non-sticky application
- INCI Name: PEG-10 Acrylate/ Perfluorohexylethyl Acrylate Copolymer (and) Perfluorohexylethyl Alcohol

## Applications

- Alcohol-based foaming hand and skincare products
- Foaming personal care cleansers and conditioners
- Cosmetic preparations utilizing alcohols or lower aliphatic polar solvent carriers
- For use as a TSCA Exempt Cosmetic Ingredient only.

## Technical Information

Thetacare AFP-50 is a new and unique polymeric foaming agent optimized for foaming aqueous alcoholic solutions from both pressurized and non-pressurized dispensers. Thetacare AFP-50 is a diethanolamine (DEA)-free, water soluble ingredient that produces a thick, stable lather of fast-drying foam which leaves skin with a soft, clean, refreshing, non-sticky after-feel when used in alcohol-based hand and skincare products including foam applied alcohol-based hand and skin sanitizers.

Thetacare AFP-50 is an effective foaming agent for aqueous lower aliphatic alcohol solutions, glycols, ethers and other polar organic solvents such as acetone, ethyl acetate and ethylene glycol monobutyl ether for use in cosmetic formulations ranging from foamable shampoos and personal cleansers to make-up and nail polish removers. Ingredients typically requiring complicated emulsion systems may be foamed utilizing Thetacare AFP-50 such as sunscreen and insect repellent foams, analgesic rubs, antiperspirants, and pet grooming products.

## Formulary

Recommended for use in alcohol-based OTC Healthcare Antiseptic Drug Products (Skin Disinfectants/Hand Sanitizers).

**Note:** When marketing products as an antiseptic, FDA Drug Facts Labeling and OTC Drug Manufacturing guidelines must be followed. Manufacturers and marketers of OTC antiseptics may be subject to regulation by the Food and Drug Administration, and may be subject to Enforcement Action.

## Typical Properties

PROPERTY	VALUE
Appearance	Clear to slightly hazy, colorless to pale yellow liquid
Odor	Mildly alcoholic
Ionic character	Nonionic
Solubility	Soluble in aqueous lower aliphatic polar solvents
Actives, %	33±2
Density@25°C	0.95±0.02 g/ml
Boiling Point	78°C
Flash point	16°C (CC)
Storage	Stable to freezing. Gently mix before use
Shelf life	3 years

## Packaging and Handling

Thetacare AFP-50 is available in:  
275 gallon totes (Net Wt. 2000 lbs)  
55 gallon plastic drums (Net Wt. 400 lbs)  
5 gallon pails (Net Wt. 35 lbs)

Refer to the Safety Data Sheet (SDS) for information on the safe use, handling, storage and disposal of this product.

DOT: Ethanol Solution, Hazard Class 3, UN 1170, PG III

Whether you're looking for a replacement product or an ingredient for a specific attribute, give us a call. We can provide assistance based upon your particular formulation requirements and composition; please feel free to contact us.

*Please refer to back page for important information*

## Thetacare™ AFP-50

Polymeric alcohol foaming agent

Thetacare AFP-50 is a polymeric foaming agent optimized for foaming aqueous alcoholic solutions from both pressurized and non-pressurized dispensers. Thetacare AFP-50 is a new and unique material, and it does not contain phosphate or dimethicone or related silicone-based surfactants.

Thetacare AFP-50 produces a thick, stable lather of fast-drying foam that spreads evenly, leaving skin with a soft, clean, refreshing, non-sticky after-feel when used in alcohol-based hand and skincare products that include foam applied alcohol-based hand and skin sanitizers.

The table below offers formulation guidance for the preparation of foaming alcohol-based hand sanitizers.

Thetacare AFP-50 is an effective foaming agent for aqueous lower aliphatic alcohol solutions, glycols, ethers and other polar organic solvents such as acetone, ethyl acetate and ethylene glycol monobutyl ether for use in cosmetic formulations ranging from foamable shampoos and personal cleansers to make-up and nail polish removers. Ingredients typically requiring complicated emulsion systems may be foamed utilizing Thetacare AFP-50 such as sunscreen and insect repellent foams, analgesic rubs, antiperspirants, and pet grooming products.

Foaming alcohol-based Hand Sanitizer*	
Ingredient	Wt. %
Water	to 100
Alcohol (ethanol or mix of lower aliphatic alcohols)	60-75 <sup>(1)</sup>
Thetacare AFP-50	4-8
Emollients, fragrance etc.	0.05-0.1 <sup>(2)</sup>

Procedure:  
**Add ingredients in order listed with sufficient agitation.** Add fragrance and/or additional skin emollients as desired.

\*Note - Manufacturing, Packaging and Marketing of Topical Anti-Microbial products, which include any cosmetic preparations with implicit or implied physiological effect, are subject to regulation by the Food and Drug Administration and may be subject to Enforcement Action.

(1) Physiologically recognized effective alcohol content range 60-75%, expressed in volume % for OTC alcohol-based topical antiseptic products.  
(2) Unlike traditional foaming agents, the addition of alkyl foam boosting or stabilizing agents tends to de-stabilize and reduce the foam potential of fluorochemical-based aqueous alcoholic foaming agents. If the addition of emollients, fragrances or other ingredients is desired, evaluate for the foam reduction impact of each ingredient and minimize or eliminate where possible.

**Do not aerosolize or atomize Thetacare AFP-50.**

This information relates only to the specific material referred to herein and not to its use in combination with any other material or in any process, unless explicitly stated herein. Such information is, to the best of our knowledge and belief, accurate and reliable as of the date compiled; however, no warranty, guarantee or other representation is made as to its accuracy, reliability, or completeness, or regarding any liabilities arising from others' intellectual property rights. ID# 20200917