

Liponic™ EG-1

Multifunctional Sensorial Humectant



Liponic™ EG-1 Liponic™ EG-1 VLG*

INCI: Glycereth-26

CAS #: 31694-55-0

EC #: Exempt

A multifunctional ingredient that can be used as a humectant, solubilizer, co-emulsifier, and skin conditioning agent.

Long lasting skin moisturization

Non-tacky, smooth, luxurious feel

Improves foam volume & density

Conditioned feel on hair

Liponic™ EG-1 is the 26 mole ethoxylate of palm-free glycerin. Additionally, it may be utilized as a butylene glycol replacement. It functions as a dispersant, detackifier, solubilizer, viscosity modifier, plasticizer, foam modifier and an exceptional lubricant.

In skin care applications, Liponic™ EG-1 provides superior skin moisturization through its humectant property and film forming on the skin. Skin conductance measurements using the SkinLab™ instrument document this moisturization performance based on a ten-person panel test applying a lotion with 5% Liponic™ EG-1. Additional key benefits provided by Liponic™ EG-1 include the reduction of playtime, smooth and soft skin feel, elegant and luxurious appearance of emulsion systems, and excellent solubilization properties for colorants, powders and active ingredients.

Liponic™ EG-1 provides a smooth elegant feel without the tackiness normally associated with glycerin. If used in combination with glycerin or butylene glycol, it will help reduce the tackiness and improve the overall skin feel, providing elegance to formulations.

Recommended applications



Bath & Shower



Hair Care



Skin Care

Liponic™ EG-1 also demonstrates performance benefits in cleansing surfactant systems boosting foam volume and foam density. Numerous studies were designed and conducted to document these improvements in a sulfate-free body wash and a sulfate-free shampoo.

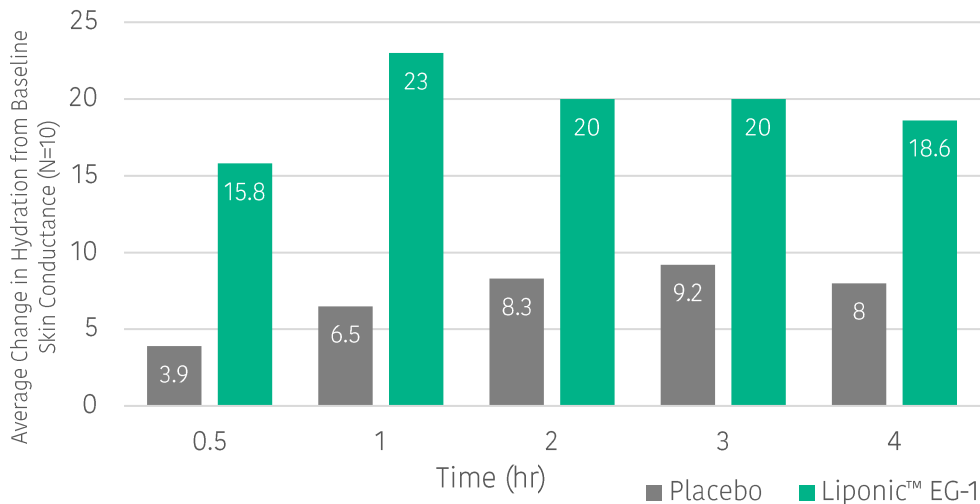
* Liponic™ EG-1 VLG is manufactured in Germany and is marketed by Vantage™ primarily to manufacturers in Europe, Middle-East and Africa. Liponic™ EG-1 VLG. Liponic™ EG-1 VLG is a functional equivalent for Liponic™ EG-1.



Vantage

Skin moisturization

Liponic™ EG-1 delivered by an oil-in-water lotion provided superior moisturization vs. placebo lotion. Moisture readings were taken with the SkinLab™ moisture probe measuring conductance. Skin baseline readings were taken on the forearms of 10 panelists and then a 'control' lotion and a lotion with 5% Liponic™ EG-1 were applied to separate forearms to measure changes over baseline. Readings were taken at 1-hour intervals and showed enhanced moisturization using Liponic™ EG-1 when compared to the control.



Increase of foam

Glycerin vs Liponic™ EG-1

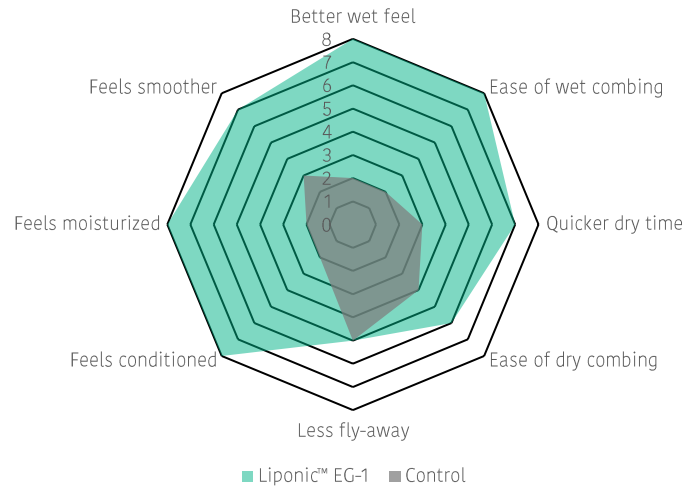


3 minutes after placement

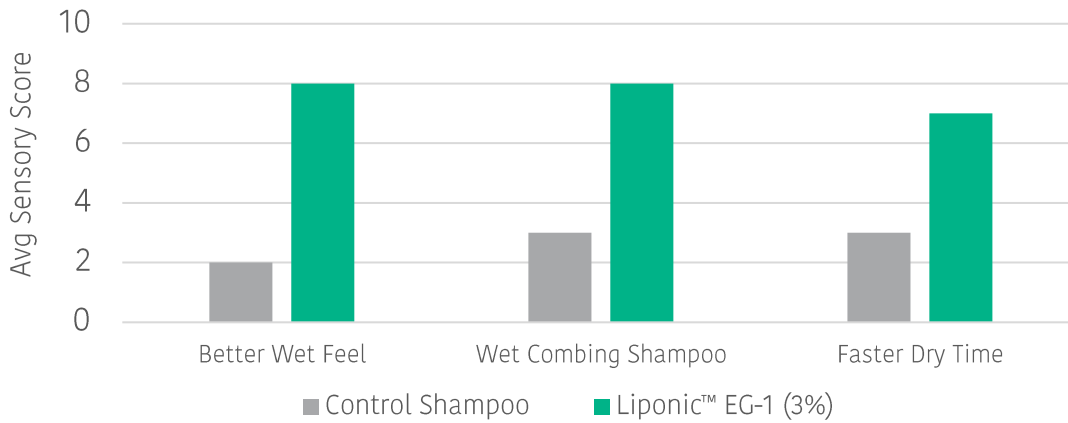
The image demonstrates improved foam volume and foam density of Liponic™ EG-1 in a sulfate-free cleansing surfactant system. Sulfate free cleansing surfactant systems (shampoo, body wash and facial) are known to have low foaming and a loose foam structure. A graduated cylinder test was used to conduct a side-by-side evaluation to show visual performance gains. Glycerin is typically used in these systems to improve skin-feel however, it does not result in good foam structure.

Hair tress study

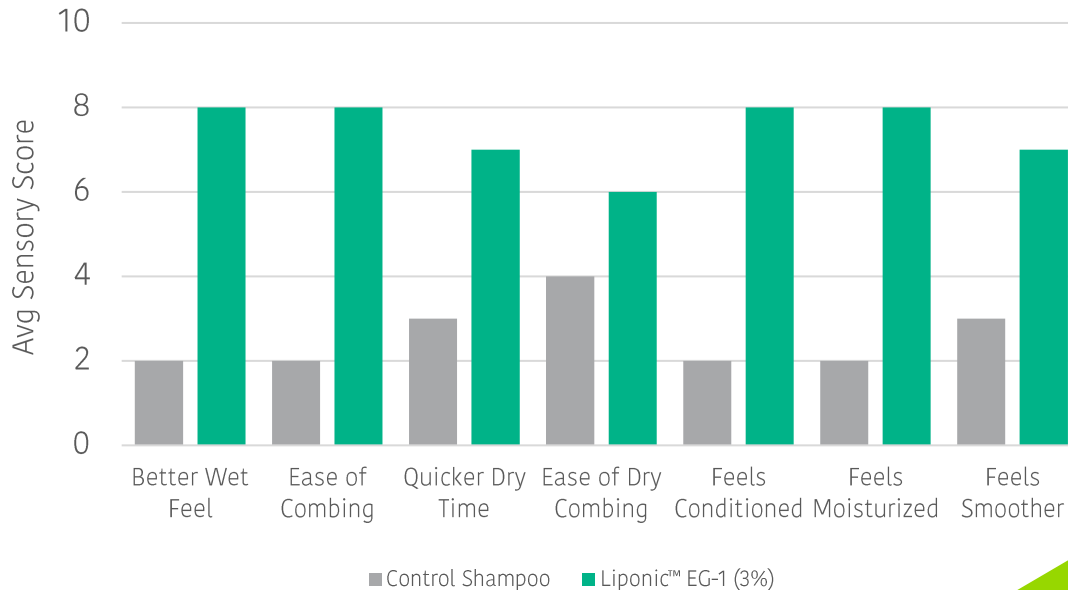
Hair tress testing is another key parameter to further evaluate the improved performance of Liponic™ EG-1 in a surfactant-free shampoo. Panelists evaluated wet and dry combing, hair feel and dry time properties of formulations with 3% Liponic™ EG-1 in comparison to a control without Liponic™ EG-1.



Wet Performance Properties in Sulfate-Free Shampoo



Dry Performance Properties in Sulfate-Free Shampoo



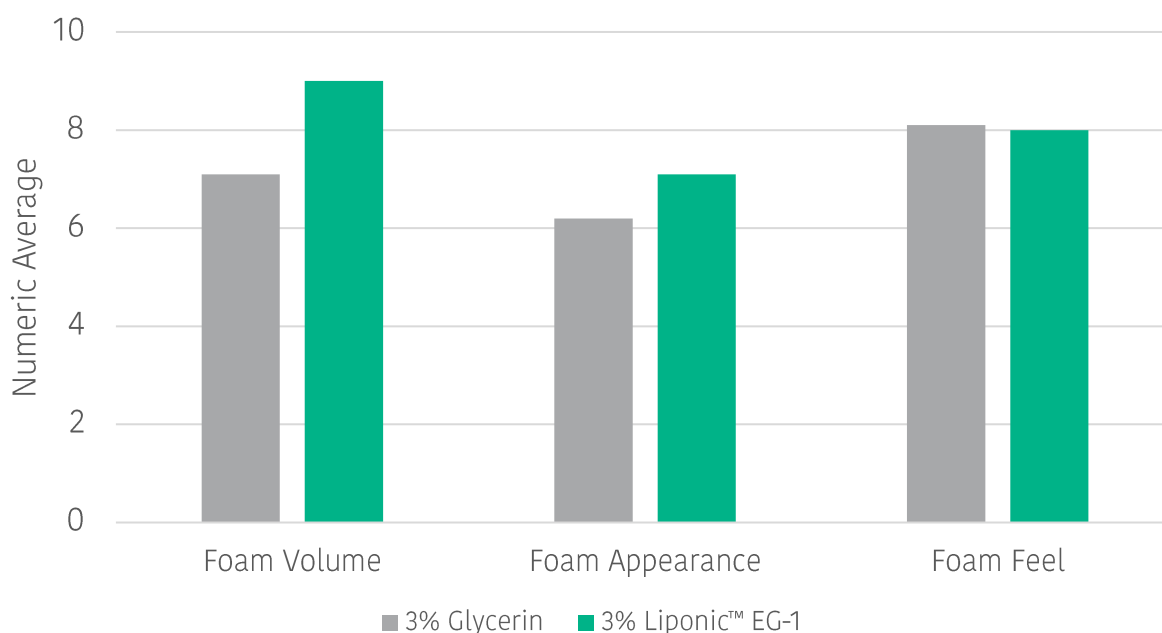
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Appearance @ 25C	Clear to hazy, slightly viscous liquid
Odor	Characteristic
Color APHA (50% aq. solution)	30 max
Moisture Content, %	1 max
Recommended Use Level	3-12%
Solubility	Soluble in water and alcohol; Insoluble in mineral and vegetable oils

Body wash panel test

Hand washing studies were performed to demonstrate perceived improvement in foam volume and foam appearance benefits. Liponic™ EG-1 was placed in a sulfate-free body wash formulation and compared to glycerin in the same formulation base.



Formulation guidelines

Liponic™ EG-1 can be used in a variety of applications. Use levels range from 0.5 to 10%. It is ideal for use in emulsion systems, surfactant systems, color cosmetics and facial masks. Liponic™ EG-1 is water soluble and can be used in both hot and cold process formulations.