Expand a lineup of raw materials for hair care & body care products

with foam texture improver

To improve foaming property and foam texture

Sanyo Chemical Industries, Ltd. (Head office: Higashiyama-ku, Kyoto City; President: Takao Ando) has expanded its line up of raw materials for hair care & body care products with FROTHMEISTER, which can improve the foaming properties and foam texture in added to detergents as shampoos, etc.

【Background】
Sanyo provides a variety of products for hair care & body care, such as detergents, foaming agents, conditioners, moisturizers, emulsifiers, etc. Detergents for shampoos and face washes are required not only basic performances such as detergent activity or rinsability but also sensory satisfaction like comfortable feel. In recent years, the needs for foaming properties and foam texture are increasing. In order to respond to these needs, we added FROTHMEISTER to our product lineup for hair care & body care products.

【Features】
Rich, bouncy and fine foam with superior foaming properties is preferred for shampoos or face washes. Such foam has more durability and provides soft & smooth texture in addition to low damage by friction to scalp or skin.
FROTHMEISTER increases the bounciness and provides rich fine foam when 1 or 2% added to the detergents for shampoos, etc.

Further, amino acid-based surfactants are often used as detergent bases with the benefits of mildness and smooth finish for shampoos or face washes; however, the amount, durability and bounciness of foam tend not to be satisfying. FROTHMEISTER is effective to improve foam texture in the formulations of detergents including amino acid-based surfactants.

FROTHMEISTER is easy to handle and applicable in wide pH range from weak acidic to weak alkaline because of its immune to pH. It is also relatively less sensitive to electrolyte, thus FROTHMEISTER is an ideal agent for various formulations

【Abstract of new lineup】
Sanyo added FROTHMEISTER HG-375, FROTHMEISTER GC-48 and FROTHMEISTER SP-10 to the lineup of raw materials for hair care & body care products. Three of them are Polyoxyalkylene ether-type foam texture improvers. All are registered in Japanese Standards of Quasi-drug Ingredients. Each has different viscosity, hydrophilicity and lipophilicity. Sanyo can offer optimal formulation depending on the surfactants of detergent bases or targets of foam viscosity, foaming property and fineness.

【Future Plans】
Sanyo will continue to expand our lineup of FROTHMEISTER. And we will comprehensively respond to various needs of comfortable feel or sensory satisfaction by offering optimal formulation with our wide lineup of surfactants.
① Fines (size) of foam

Evaluation Method
The mixture according to the following formulation was diluted by water so that the concentration of active surfactants (including FROTHMEISTER) became 1.0wt%. This aqueous solution was agitated with a blender, and shot the foam condition at 5 s after stopping the mixer with a dynamic foam analyzer (KRUSS GmbH). It is clear that the foam size of the one with FROTHMEISTER is fine.

Formulation
Sodium Laureth Sulfate (Anionic surfactant) 10.5%, Amphoteric surfactants 4.5%, FROTHMEISTER HG-375 1.5%, Water 83.5%

② Foam Viscosity and Foam Height

Evaluation Method
The mixture according to the following formulation was diluted by water so that the concentration of active surfactants (including FROTHMEISTER) became 0.5wt%. Foam Viscosity was measured with the Hart-DeGeorge method. The foam height was taken at the top after 30s agitation with a blender. It can be said that the sample with FROTHMEISTER has high foam viscosity and high foaming height.
Formulation
Sodium Laureth Sulfate (Anionic surfactant) 10.5%,
Amphoteric surfactants 4.5%, FROTHMEISTER 1.5%, Water 83.5%

③Picture of Foam viscosity evaluation

With FROTHMEISTER SP-10       Blank (no added)

Evaluation Method
Foam Viscosity was evaluated by the foam condition at 15s after foaming.
The foam of the blank flowed down from the funnel to the beaker because of its low foam viscosity. The sample with FROTHMEISTER SP-10 kept a lot on the funnel because of its bouncy foam with higher viscosity.

Formulation
Sodium Cocoyl Glutamate (amino acid-based surfactant) 10.5%,
Amphoteric surfactants 4.5%, FROTHMEISTER SP-10 1.5%, Water 83.5%