

Development of laundry detergent base with excellent biodegradability and detergency that contributes to reduction of environmental impact

- Ideal for use in compact detergents because it does not cause gelation at low temperatures and can be made highly concentrated -

Sanyo Chemical Industries, Ltd. has announced that we have developed "MICELAND SCD-100," a laundry detergent base that is biodegradable, has excellent detergency, and can be formulated in high concentrations. With these features of "MICELAND SCD-100", we aim to further reduce environmental impact and contribute to the creation of a sustainable society.

There is a growing demand for laundry detergents with reduced environmental impact, in addition to basic performance, such as washing power. And liquid detergents that are easy to use and leave no residue even in water-saving washing machines have become mainstream. In particular, demand for compact liquid detergents has been increasing in recent years, not only because they help conserve resources in containers and reduce energy consumption for transportation, but also because their portability and ease of use are widely accepted by consumers. One of the factors supporting the spread of compact liquid detergents is the improving functionality of surfactants, which are the detergent bases. Until then, when detergent bases were blended in high concentrations in order to accommodate compact containers, the surfactant would cause gelation. Therefore, a detergent base that does not cause gelation even when blended in high concentrations was required. In addition, high detergency was required to reduce the amount of detergent used per wash. We have developed a surfactant to meet these needs. However, surfactants with high detergency tend to be poorly biodegradable, and surfactants with excellent biodegradability are often highly crystalline and cause gelation when highly concentrated, making them unsuitable for use in compact liquid detergents.

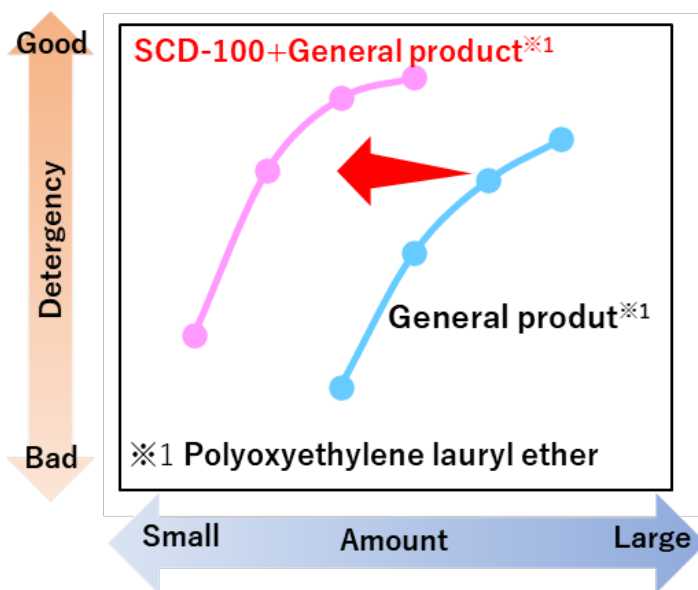
We believe that the growing concern for safety and the environment will increase the need to further reduce the environmental impact of compact liquid detergents, and we have developed "MICELAND SCD-100," as detergent base that adds value to compact liquid detergents by being biodegradable.

"MICELAND SCD-100" can achieve both "biodegradability" and "detergency", which have been difficult to achieve with conventional compact liquid detergents. We succeeded to achieve both properties through our proprietary interface control technology. MICELAND SCD-100 is a neutral nonionic surfactant that causes minimal damage to clothes and provides excellent detergency against sebum stains. Compared to conventional compact liquid detergent, the detergent using MICELAND SCD-100 can reduce the amount used while maintaining the same detergency as before, thereby reducing environmental emissions. And when the same amount of detergent is used, it provides the higher detergency, so the concentration can be adjusted to meet the customer's needs. In addition, its high water solubility and excellent flowability even at high concentrations make it suitable for use in compact liquid detergents. Moreover, its excellent biodegradability improves the efficiency of sewage treatment and reduces energy consumption, thereby contributing to the reduction of environmental impact.

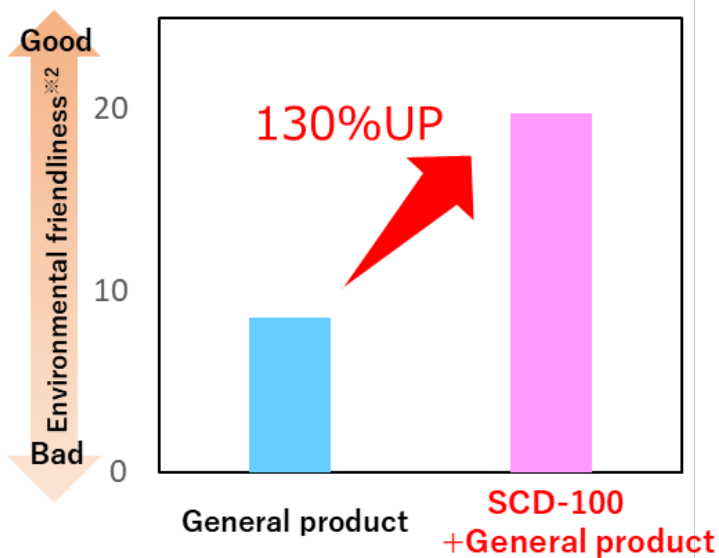
[Future plans]

We believe that the need for detergent base that can contribute to reducing environmental impact will continue to expand in the future. We will continue to develop high-performance products that contribute to reducing the environmental impact of detergents, taking into consideration the Life Cycle Assessment of raw materials, manufacturing, distribution, consumption, and disposal, including the use of biomass raw materials.

Relation between amount used and detergency

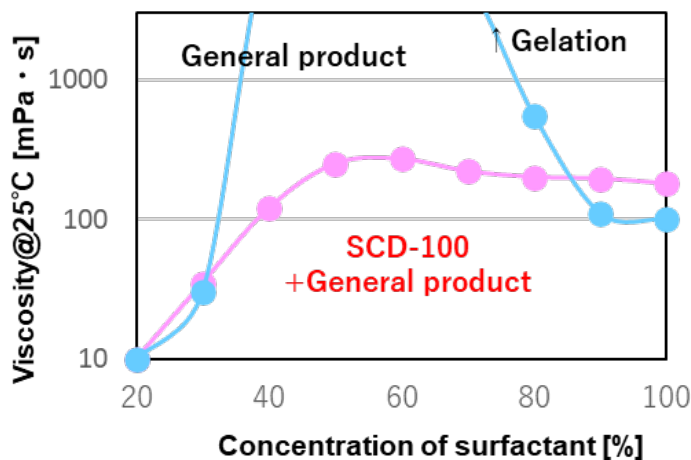


Environmental friendliness*2



*2 Sanyo original index :
 Environmental friendliness = (Biodegradability)/(standard amount)

Water solubility test



*All ratios of the mixture of MICELAND SCD-100/general-product in this document are "1/1" by weight.

About Sanyo Chemical

Sanyo Chemical established in 1949 in Kyoto, Japan, is a global manufacturer and seller of performance chemicals. Beginning as a manufacture of soap and texture agents we have since diversified our product portfolio to meet the needs of the market, Today, we feature over 3,000 different types of products and have established an international presence. Our portfolio of chemicals spans a variety of industries and types, from automotive components to daily-use electronics, as well as cosmetics and medical equipment, all with the aim of creating ore safe and environmentally friendlier offerings, improving lives and societies across the world. We aim to contribute to realize a sustainable society through our corporate activities.

<https://www.sanyo-chemical.co.jp/eng>

Contact

Public Relations Department
Corporate Planning Division

Tel : +81-75-541-4312

E-mail:pr-group@sanyo-chemical.group