



Amino Acid-Based Personal Care Ingredients That Are "Environmentally Friendly and Mild to Skin" A importante Control Succeeds in Dovelopi

Ajinomoto Co., Inc. Succeeds in Developing a Highly Biodegradable Alternative to Plastic Microbeads¹ for Cosmetics

Launch Planned for the First Half of Fiscal 2022

TOKYO, **April 26**, **2021** -- Ajinomoto Co., Inc. ("Ajinomoto Co.") has utilized its unique amino acid technologies in successfully developing a highly biodegradable alternative to plastic microbeads for cosmetics. This material has the same feel and function as microbeads derived from plastics, which are widely used in skin care and make-up products. Ajinomoto Co. plans to launch the product in the first half of fiscal 2022.

As awareness of sustainability and ESG initiatives has increased in recent years, countries have introduced stricter regulations to ban or reduce the use of plastics, which are a type of polymer that has a substantial adverse impact on the environment. Some countries in North America, Europe and Asia have already tightened regulations on rinse-off personal care and other products that use plastic microbeads² and have switched to alternatives.

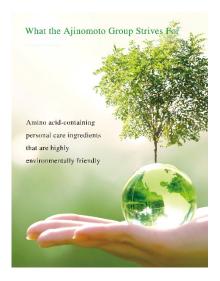
However, due in part to the technical difficulty of developing an alternative to plastic microbeads used in skin care and make-up products that retains their feel and user experience, regulations on their use have not yet been enacted in many major industrial nations, including Japan. Under these circumstances, a trend has now become clear among cosmetics manufacturers to find alternatives to these plastic microbeads.

As a result, environmentally friendly alternatives to the plastic microbeads used in skin care and make-up products have been developed and commercialized. However, technical issues have become evident in developing alternatives that can reproduce the same feel and function as conventional plastic microbeads—their softness to the touch, moist feel and excellent adhesion to skin.

Since its launch in 1972 of the world's first amino acid-based surfactant, made from glutamic acid using plant-based fermentation, Ajinomoto Co. has



Successfully developed alternative to plastic microbeads for cosmetics



been a pioneer in supplying amino acid-based personal care ingredients to more than 5,000 companies in 55 countries around the world (as of May 2019). In addition to its mainstay amino acid-based surfactants, as part of its specialty chemicals business Ajinomoto Co. also leverages its extensive expertise in amino acids to provide functional materials that are mild to skin, mainly for use in make-up products. One of these functional materials, $Amihope_{\circledcirc}$ LL, is used in face powder and many other cosmetics as a high-lubricity plate-shaped powder characterized by a silky, moist feel and excellent adhesion to skin.

Using its expertise and technologies from *Amihope*® LL, Ajinomoto Co. has been working in recent years to develop a pleasant-feeling, highly functional alternative to plastic microbeads. As a result, Ajinomoto Co. succeeded in applying the functions of *Amihope*® LL to naturally derived spherical particles and thus developed an alternative to conventional plastic microbeads that has the same feel and function. Because this newly developed product uses only naturally derived raw material, it is highly biodegradable and is expected to reduce burden on the environment. It also significantly addresses the technical issues found in many existing plastic microbead alternatives.

In its FY2020-2025 Medium-Term Management Plan, Ajinomoto Co. has made the creation of a resource recycling society its goal for coexistence with local communities and the Earth, and is aiming for zero plastic waste and a 100% sustainable procurement ratio for important materials by fiscal 2030. In its roadmap to 2030, Ajinomoto Co. has positioned the reduction of the plastic it uses and the conversion to mono-materials and other recyclable materials as concrete measures to promote resource recycling.

The development and launch of this material are an important part of these measures. Through its development of amino acid-based personal care ingredients that are environmentally friendly and mild to skin, Ajinomoto Co. will continue to contribute to a reduced burden on the global environment and comfortable lives for consumers.

Glossary

- 1. Plastic microbeads are bead-shaped plastics with a diameter of 5 mm or less used in rinse-off personal care products such as face wash and toothpaste, as well as in skin care and make-up products. These and other plastics manufactured in micro-sizes are classified as primary microplastics, while plastics manufactured in large sizes that are crushed or broken down to micro-sizes in the natural environment are classified as secondary microplastics. (Source: Ministry of the Environment, Government of Japan, "Purasuchikku wo Torikmaku Kokunaigai no Jokyo" (Situation of Plastics in Japan and Overseas), 2018)
- 2. At the G7 Summit held in Charlevoix, Canada in June 2018, a charter was enacted that included a provision for "Working with industry towards reducing the use of plastic microbeads in rinse-off cosmetic and personal care consumer products, to the extent possible by 2020." (Source: Ministry of the Environment, Government of Japan, "Purasuchikku wo Torikmaku Kokunaigai no Jokyo" (Situation of Plastics in Japan and Overseas), 2018)

The Ajinomoto Group, unlocking the power of amino acids, aims to resolve food and health issues associated with dietary habits and aging, and contribute to greater wellness for people worldwide.

Based on the corporate message "Eat Well, Live Well.", we have been scientifically pursuing the possibilities of amino acids to aim for future growth by creating new value through sustainable and innovative solutions for communities and society.

The Ajinomoto Group has offices in 35 countries and regions, and sells products in more than 130 countries and regions. In fiscal 2019, sales were 1.1000 trillion yen (10.1 billion U.S. dollars). To learn more, visit www.ajinomoto.com.

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