

**Development of Environmentally Friendly Superabsorbent Polymer  
Using Biomass Raw Materials Derived from Plants**

- Acquired the Biomass Mark certified by the Japan Organics Recycling Association -

Sanyo Chemical Industries, Ltd. announces that its wholly owned subsidiary SDP Global Co., Ltd. has developed an eco-friendly superabsorbent polymer (SAP) made using plant-based biomass as part of its raw materials and has acquired the Biomass Mark\*<sup>1</sup> certified by the Japan Organics Recycling Association.

Amidst the urgent need to address climate change, including global warming, Sanyo Chemical group is focusing on various initiatives to contribute to the realization of carbon neutrality. One such initiative is the active use of biomass materials such as plants. Plants absorb CO<sub>2</sub> during their growth process, and thus, over their entire life cycle, their emissions and absorption are balanced, leading to a reduction in the amount of CO<sub>2</sub> in the atmosphere. In addition, using a renewable biomass resource instead of finite petroleum resources is expected to contribute to the formation of a sustainable recycling-oriented society.

SAP is a hydrophilic polymer with a cross-linked structure, that can absorb and retain water several hundred to a thousand times its own weight. SAP is mainly composed of partially neutralized sodium polyacrylate, but its raw material is acrylic acid made from petroleum-derived propylene. SDP Global has developed SAP using biomass raw materials for 10% and 25% of the raw materials, taking advantage of its accumulated knowledge and unique know-how, and has acquired the Biomass Mark (Certification No. 220085: 10% biomass, Certification No. 220086: 25% biomass) authorized by the Japan Organics Recycling Association. SDP Global starts providing samples.

[Future plans]

In addition to the use of biomass materials, SDP Global is developing products with low environmental impact from the perspective of Life Cycle Assessment (LCA), including the development of SAP\*<sup>2</sup> with excellent dehydration properties that contributes to a new collection and recycling system for disposable diapers. We are working on the development of products with low environmental impact from the perspective of Life Cycle Assessment, which covers raw materials, manufacturing, distribution, consumption, and disposal. We will continue to develop environmentally friendly products and contribute to the realization of a sustainable society.

<Reference >

\*1: The "Biomass Mark" certified by the Japan Organics Recycling Association is a mark of environment-friendly products that utilize biological resources (biomass) such as plants, and whose quality and safety comply with relevant laws, regulations, standards, and specifications.

<https://www.jora.jp/biomassmark/> (Japanese site)

\*2: 2020 press release "Toward the future of disposable diapers - Development of superabsorbent polymer with excellent dehydration properties"  
<https://www.sanyo-chemical.co.jp/archives/6329>(Japanese site)

## **About SDP Global Co., Ltd.**

Since the world's first commercial production of SAP by Sanyo Chemical in 1978, SAP has been used in a wide range of fields, including sanitary goods such as disposable diapers, agriculture and gardening, pets, civil engineering and construction. SDP Global was established in 2001 and is a wholly owned subsidiary of Sanyo Chemical. It manufactures and sells SAP for diapers and other hygiene products for health care and life care.

[https://www.sanyo-chemical.co.jp/eng/products\\_info/superabsorbent-polymer/about\\_sdp](https://www.sanyo-chemical.co.jp/eng/products_info/superabsorbent-polymer/about_sdp)

## **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>

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