

February 9th, 2023

Nippon Shokubai Acquired ISCC PLUS Certification for Various Products, Including Acrylic Acid, Superabsorbent Polymers, and Ethylene Oxide

**–To promote the use of biomass as raw materials for
disposable diapers, detergents, and other products–**

NIPPON SHOKUBAI CO., LTD. (Headquarters: Osaka, Japan, President: Kazuhiro Noda, hereinafter “Nippon Shokubai”) has acquired ISCC PLUS certification*1 for 19 products including acrylic acid, superabsorbent polymers (hereinafter “SAP”) and ethylene oxide produced at its Himeji Plant and Kawasaki Plant.

The certification enables us to establish a system to manufacture and market certified products using biomass-derived raw materials allocated by the mass balance method*2 and to offer a wide range of products with low environmental impact.

The Nippon Shokubai Group has developed a global supply system for SAP (water-absorbent material for disposable diapers) and acrylic acid (a raw material for SAP), and has the largest production capacity in Japan for ethylene oxide (a raw material for polyester fiber and detergents). As a responsible supplier of these products, in addition to the above initiatives, Nippon Shokubai is also engaged in the development of a new acrylic acid manufacturing process using 100% biomass derived from natural products and joint study with other companies for manufacturing and marketing ethylene oxide derivatives using biomass raw materials.

Aiming to achieve carbon neutrality by 2050, the Nippon Shokubai Group will implement the transformation outlined in the Group’s long-term vision and mid-term management plan and contribute to increasing customer value and realizing a sustainable society.

*The Nippon Shokubai Group commits and declares its compliance with the ISCC PLUS requirements in accordance with the latest ISCC regulations.

◆Nippon Shokubai's ISCC PLUS certified products

| Product Name | | Production Locations | Main Applications |
|---|---|----------------------|--|
| Acrylic Acid | | Himeji | Acrylic esters, Superabsorbent polymer, Fiber modifier, Flocculant |
| Superabsorbent Polymers (AQUALIC™ CA) | | Himeji | Disposable diapers, Sanitary pads, Pet sheets |
| Acrylic Esters | Methyl Acrylate Butyl Acrylate 2-Ethylhexyl Acrylate 2-Octyl Acrylate (In development) | Himeji | Raw material for adhesives and paint, For use in molding resin copolymerization, Acrylic fibers, Acrylic rubber |
| Acrylic Acid Special Esters | 2-Hydroxypropyl acrylate | Himeji | Paints and coatings, Adhesives and pressure-sensitive adhesives, Printing ink, Photosensitive resins |
| | 2-Hydroxyethyl acrylate | Kawasaki | Paints, Adhesives and pressure sensitive adhesives, Fiber treatment, Improving agent for copolymers, Photosensitive resin |
| Methacrylic Acid Special Esters | 2-Hydroxyethyl Methacrylate | Himeji | Paints and coatings, Adhesives and pressure-sensitive adhesives, Printing ink, Photosensitive resins |
| Ethylene Oxide | | Kawasaki | Ethylene glycol, Ethanolamine, Raw material for organic synthesis such as alcohol ethoxylates, Surfactants |
| Ethylene Glycol | (Mono)Ethylene Glycol Diethylene Glycol Triethylene Glycol | Kawasaki | PET resins, Polyester fibers, Antifreeze, Unsaturated polyester, Polyurethane, Softeners for cellophane, Synthetic resins |
| Ethanolamine | Monoethanolamine Diethanolamine Triethanolamine | Kawasaki | Synthetic detergents, Gas absorbents, Metal corrosion inhibitors, Detergents for electronic materials, Waxes |
| Secondary Alcohol Ethoxylates (SOFTANOL™) | | Kawasaki | Surfactant, detergents for household, shampoo, various industrial detergents, scouring agent |
| Polycarboxylates (AQUALIC™ L) | | Himeji, Kawasaki | Raw material for detergents |
| Polyethyleneimine Ethoxylate | | Kawasaki | Raw material for detergents, Papermaking agents (deinking, pitch control), Pigment dispersant, Water treatment agents (scale inhibitor), Abrasive grains dispersant, Plating additives |

◆Related releases in the past

(Acquisition of ISCC PLUS certification by NIPPON SHOKUBAI EUROPE N.V., a subsidiary in Belgium)

July 8, 2021: <https://www.shokubai.co.jp/en/news/202107087200/>

March 4, 2022: <https://www.shokubai.co.jp/en/news/202203047412/>

*1) ISCC (International Sustainability and Carbon Certification): A globally applicable certification system that covers sustainability and carbon. ISCC PLUS certification is a certification system that manages and guarantees biomass and renewable materials and products manufactured and marketed worldwide, throughout the supply chain.

*2) Mass balance method: When biomass-derived raw materials and petroleum-derived raw materials are mixed, the ratio of the biomass-derived raw materials used is assigned as the biomass ratio of the specific end product. The method has been authorized by the ISCC PLUS system.

About NIPPON SHOKUBAI CO., LTD.: Since 1941, Nippon Shokubai has grown up its business with unique catalyst technology. Nippon Shokubai has supplied, for example, ethylene oxide, acrylic acid, automobile catalysts, process catalysts and so on. Among all, our global market share of superabsorbent polymers is the largest in the world now (according to Nippon Shokubai research). Nippon Shokubai is a global chemical company operating under its corporate mission "TechnoAmenity-Providing affluence and comfort to people and society with our unique technology."

<https://www.shokubai.co.jp/en/>

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