

News Release (December 20, 2024)

TOMATEC × Panasonic Energy

Joint Development of Trace Element Fertilizer Derived from Panasonic Energy Dry Batteries, Establishment of a Process to Recycle Used Dry Batteries as Fertilizer Materials

- Sales to Begin by Fiscal Year 2024 -

TOMATEC Co., Ltd. ("TOMATEC"; President: Teruhisa Yokoyama), a consolidated subsidiary of Toyo Seikan Group Holdings, Ltd. (Tokyo 5901; President: Ichio Otsuka), has established a recycling process in collaboration with Panasonic Energy Co., Ltd. ("Panasonic Energy"; President, CEO: Kazuo Tadanobu) to utilize used Panasonic Energy dry batteries as raw materials for TOMATEC's trace element fertilizers.*¹ TOMATEC will start selling fertilizers derived from batteries by TOMATEC in fiscal year 2024.

■ Implementation Flowchart of this Initiative



Panasonic Energy and TOMATEC have collaborated on the development of fertilizers derived from used batteries, aiming to expand the value of batteries and effectively utilize them as resources. Dry batteries contain high purity manganese and zinc, which are essential nutrients for plants. Panasonic Energy separates the mixed powder (black mass) containing components, such as zinc and manganese, from its used batteries, and TOMATEC converts this mixed powder into compound micronutrient fertilizers.*²

Toyo Seikan Group will continue to promote the reduction of environmental impact and the realization of a sustainable society.

*¹ Trace element fertilizers contain trace elements, such as zinc, manganese, iron, and boron, which are necessary for plant growth. By adding them to crops and soil, these fertilizers play a role in promoting healthy crop growth and replenishing minerals that are lacking in the soil. They also contribute to sustainable agriculture by enabling more efficient crop cultivation, stable food production, and soil health maintenance.

*2 The zinc and manganese contained in used dry batteries are melted and vitrified, reducing them to a form of manganese and zinc that is easily absorbed by crops.

About TOMATEC Co., Ltd.

TOMATEC is a material manufacturer that provides various products globally, including glass frits, composite oxide pigments, gel coats for FRP, top coats, various materials for artificial marble, and trace element fertilizers. We strive to conduct our business activities under the management spirit of “always for you and with you.” For more information, please visit <https://tomatec.co.jp/en/>

About Toyo Seikan Group Holdings, Ltd.

Toyo Seikan Group Holdings, Ltd. is a world-class comprehensive packaging manufacturer that delivers a variety of packaging containers using materials, such as metal, plastic, paper, and glass. In our Long-Term Management Vision 2050, “The Future, Wrapped for All,” we set a goal to go beyond our traditional field of packaging, aiming to become a corporate group that creates new value that changes society. Founded in 1917, Toyo Seikan Group Holdings, Ltd. conducts business on a global scale, with 44 group companies in Japan and 47 overseas, and currently employs a multinational workforce of 20,000 people. For more information, please visit <https://www.tskg-hd.com/en>.

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