

News Release

April 15, 2019 KANEKA CORPORATION

Kaneka Corporation and Seven & i Holdings Co., Ltd. Co-Developing Products using Kaneka Biodegradable Polymer PHBH

Kaneka has set the ESG Charter to be a guidance for daily work of every employee in order to pursue a versatile business that contributes to a vigorous and healthy life of people while providing a solution to various social issues. As a research and development-based material manufacturer, Kaneka offered innovative and unique products to Seven & i Holdings Co., Ltd., and both companies agreed to pursue a more sustainable society and aim for solutions of global environmental issues through joint product development. Seven & i Holdings Co., Ltd. will develop a variety of products using "Kaneka Biodegradable Polymer PHBH" ("PHBH"), the material Kaneka developed to solve the problems associated with microplastics. As a start, new straws for "SEVEN CAFÉ" run by Seven-Eleven Japan Co., Ltd. and other group companies will be introduced to the market by the autumn of 2019.

While plastic products are very convenient and essential in our daily lives, they are often not disposed properly. There has been increasing concern that marine microplastics may affect our biological systems and human health. In the midst of growing interest in eco-friendly materials, Seven & i Holdings Co., Ltd., who has continuously worked to reduce environmental impact by improving its packaging materials, jointly developed products with Kaneka using PHBH and gave for a highly complementary remark on PHBH for its excellent biodegradability in seawater.

PHBH is a 100% plant-based biopolymer developed by Kaneka and has an excellent biodegradability under different environmental conditions. Particularly in recent years, marine pollution by microplastic has become a global social issue due to the rising concern of its negative impact on biological system. With "OK Biodegradable MARINE*" certification that guarantees biodegradability in seawater, PHBH would be able to contribute to the reduction of marine pollutions.

In order to pass a beautiful environment to our next generations, Kaneka will continuously contribute to the solution of environmental problems through development of innovative and sustainable materials.

* Biodegrades at least 90% in seawater (30°C) within 6 months. The "OK Biodegradable MARINE" certificate was issued in September 2017 by Vincotte, an international certifying body headquartered in Belgium. TÜV AUSTRIA Belgium NV took over thecertification work



from Vincotte in December 2017.





Product samples