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**FORZEAS™, a Biodegradable Polymer Compound from Mitsubishi Chemical,
Receives OK Biodegradable MARINE Certification**

Mitsubishi Chemical Corporation

Mitsubishi Chemical Corporation (MCC; Head office: Chiyoda-ku, Tokyo; President: Masayuki Waga) has announced that the biodegradable polymer compound FORZEAS™ has earned the “OK biodegradable MARINE” certification.



OK biodegradable MARINE is a marine biodegradable certification scheme created by TÜV AUSTRIA, a European institution that certifies biodegradable products. This is an international certification that certifies biodegradability in ocean water, which has fewer microorganisms than soil. To attain the certification, in addition to being able to biodegrade in ocean water, the final compost must be environmentally safe.

Recently, certain grades of FORZEAS™ met the requirement of 90% or more biodegradation within six months in ocean water (30 degrees Celsius). It also passed standards in an ecotoxicity test, which measures microbial activity. In addition, the relevant grades possess the physical properties suited for 3D printing filaments. By combining the flexible molding processes of 3D printing with marine biodegradability, MCC expects an unprecedented level of new application development.

FORZEAS™ utilizes BioPBS™, a biodegradable and plant-derived plastic MCC developed. In combination with other biodegradable polymers and additives, this compound is formulated to provide excellent performance and processability across a wide range of applications. Microorganisms decompose the material into water and carbon dioxide, leaving minimal environmental burden while contributing to the reduction of waste plastic.

In recent years, marine pollution caused by waste plastic has become a global issue. Along with the acquisition of the OK biodegradable MARINE certification this time around, MCC aims to develop new applications including shopping bag and 3D printing such as fishing gear or aquaculture applications.

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