Bio-based Engineering Plastic “DURABIO™
Mitsubishi Chemical Develops New Grade for Large Automotive Exterior Components
Jointly with Mazda
— Adopted for Front Grill of “Mazda CX-5” —

Mitsubishi Chemical Corporation

Mitsubishi Chemical Corporation (“MCC”: Head office: Chiyoda-ku, Tokyo; President: Hitoshi Ochi) has developed jointly with Mazda Motor Corporation (“Mazda”; Head office: Aki-gun, Hiroshima; President: Masamichi Kogai) a new grade of bio-based engineering plastic “DURABIO™” that can be applied to large automotive exterior components. The new grade has been adopted for the front grill of the “Mazda CX-5.”

The MCC-developed DURABIO™ is bio-based engineering plastic made from isosorbide deriving from renewable plants. The material features superior properties compared to general bio-based engineering plastics in terms of impact resistance, heat resistance and weathering, among other aspects. It also has good color-capability and, simply by adding pigments, creates a “mirror-like smooth surface and deep color tone” surpassing painted products with similar properties.

Furthermore, its hard surface and resistance to scratch eliminates the need for any coating process, enabling reduction in volatile organic compound (VOC) emissions during manufacture. Capitalizing on these features, DURABIO™ has been adopted for pillars and other exterior design components in addition to interior components, thus enhancing a broad range of applications in the automotive sector.

The new grade of DURABIO™ exhibits a good, balanced combination of superior resistance to impact and weathering and better formability due to improvement in resin composition compared with properties of conventional grades, thereby making it possible to apply the new product to the front grill and other large exterior components. The new grade is expected to be adopted for future models launched by Mazda following the CX-5.

MCC will continue to accelerate R&D on DURABIO™ to expand applications not just for automotive interior components but also for larger exterior design components, thus contributing to the production of environment-friendly motor vehicles.

For further information, please contact:
Public Relations and Investor Relations Office
Mitsubishi Chemical Holdings Corporation
Tel: [+81] (0)3-6748-7140