

Toyota Boshoku and Mitsui Chemicals have signed an MOU
to start discussions on a potential business partnership
for the commercialization of "High Impact Resistant Plastic"

KARIYA(JAPAN)-November 10, 2016 - Toyota Boshoku Corporation (TOKYO: 3116) and Mitsui Chemicals, Inc. (TOKYO: 4183) have signed a Memorandum of Understanding (MOU) to start discussions on a potential business partnership for the commercialization of "High Impact Resistant Plastic" as a resin modifier. As a resin modifier, the "High Impact Resistant Plastic" will improve the impact resistance quality of resins.

The "High Impact Resistant Plastic" that will be utilized as a resin modifier, is a polymer alloy that was developed by Toyota Boshoku and Toyota Central R&D Labs., Inc. The polymer alloy is made from polyamide 11 (PA11) that is a bio-based resin, polypropylene (PP) derived from petroleum-based resin, and Mitsui Chemicals' compatibilizer. By controlling the phase structure of PA11 and PP at the nano-level, an efficient impact absorbing structure is created that achieves top level impact resistance characteristics.

Toyota Boshoku has developed a method to utilize this "High Impact Resistant Plastic" as a resin modifier, for use not only in interior automotive parts such as seating and door trims that Toyota Boshoku manufactures, but also for other automotive parts that demand high impact resistance. Toyota Boshoku considers that the utilization of this technology will also contribute to the increased safety of automobiles. Toyota Boshoku also expects demand from non-automotive applications where high impact resistant resins are required.

Through the discussions of a potential business partnership, Toyota Boshoku and Mitsui Chemicals hope to utilize their technologies and existing sales channels to promote the "High Impact Resistant Plastic" as a resin modifier to automotive, industrial, and consumer goods markets.