

June 19, 2018

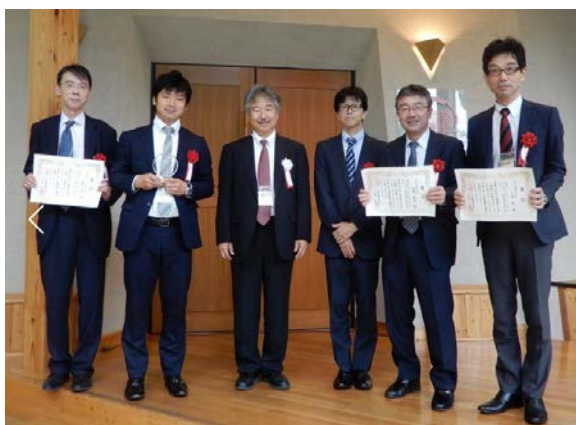
Mitsui Chemicals, Inc.

## **Mitsui Chemicals Receives ASJ Technology Award for STABiO™**

Awarded for development and commercialization of environmentally friendly polyisocyanate

Mitsui Chemicals, Inc. (Tokyo: 4183; President & CEO: Tsutomu Tannowa) on June 14 received the Adhesion Society of Japan (ASJ; President: Akio Takemura) Technology Award at the society's 56th Symposium. The award was given for Mitsui Chemicals' development and commercialization of isocyanate 1,5-Pentamethylene diisocyanate (PDI™) – the world's first plant-derived isocyanate – and the STABiO™ polyisocyanate curing agent.

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- Name of award: 40<sup>th</sup> Adhesion Society of Japan Technology Award
  - Awarded research : Development and commercialization of polyisocyanate curing agent made using new bio-based polyisocyanate STABiO™ PDI™
  - Prizewinners :
    - Mitsui Chemicals, Inc.**
      - Satoshi Yamasaki**
        - Specialty Polyurethane Materials Development Director, Coatings & Engineering Materials Division, Food & Packaging Business Sector
        - Visiting professor at Kyushu University
      - Hirokazu Morita**
        - Synthetic Chemicals Laboratory, R&D Center
      - Toshihiko Nakagawa**
        - Synthetic Chemicals Laboratory, R&D Center
      - Atsunori Shindo**
        - Senior analyst, R&D Planning & Coordination Division, R&D Center
    - Mitsui Chemicals MC, Ltd.**
      - Hiroshi Takeuchi**
        - Production Technology Director, Technology Division
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From left: Takeuchi, Nakagawa, Takemura ASJ President, Morita, Shindo, Yamasaki

Product name	STABiO™
Product description	1,5-Pentamethylene diisocyanate (PDI™) and polyisocyanate curing agent
Characteristics	<ol style="list-style-type: none"> <li>1. High reactivity compared to 1,6-Hexamethylene diisocyanate (HDI)</li> <li>2. Improves chemical resistance, gloss and abrasion resistance for paints and adhesives</li> <li>3. Non-yellowing</li> <li>4. 70% biomass (PDI™)</li> </ol>
Main applications	Automotive and plastic coatings, adhesives, etc.

With STABiO™, Mitsui Chemicals has developed the world's first plant-derived isocyanate PDI™ and polyisocyanate curing agent using this. STABiO™ is used in paints and adhesive products, granting chemical resistance, abrasion resistance and gloss to a level not found with conventional polyurethane materials.

The high reactivity of STABiO™ allows for curing at lower temperatures and shorter times, leading to increased energy efficiency. Being plant-derived also makes the material environmentally friendly. Development is now advancing for new applications to create materials with unique textures, including a product with lightweight but strong transparent and a gel with unique softness.

Going forward, Mitsui Chemicals aims to use STABiO™ for further contributions to society by accelerating the development of new uses with a focus on its Mobility, Health Care and Food & Packaging business sectors.

■ For more information on STABiO™, please visit:

<https://www.mitsuichem.com/en/service/packaging/coatings/stabio/index.htm>