

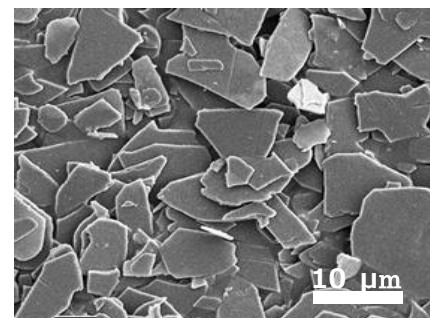
**Exclusive Agreement Reached for Sales of DIC Corporation's
Distinctive *CeramNex*TM AP10 Flake Alumina Filler**

**Imparts outstanding strength and heat dissipating properties to electronics components and
is expected to contribute to the proliferation of CASE vehicles and 5G-enabled devices**

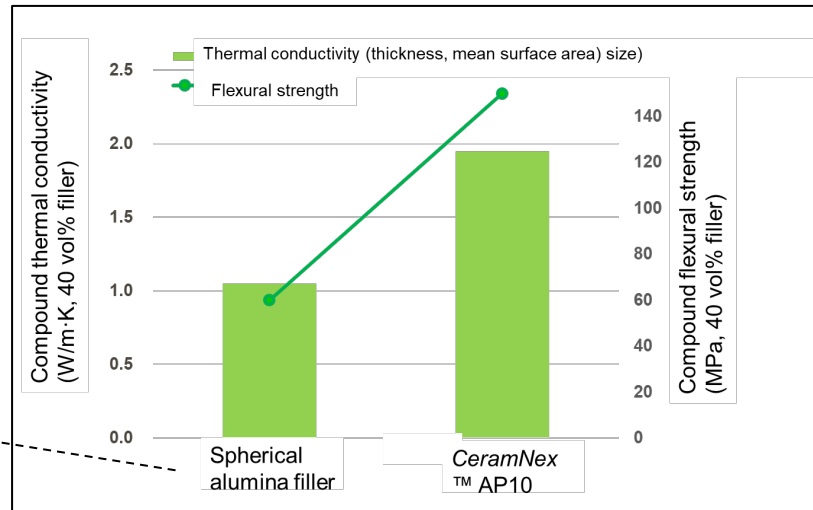
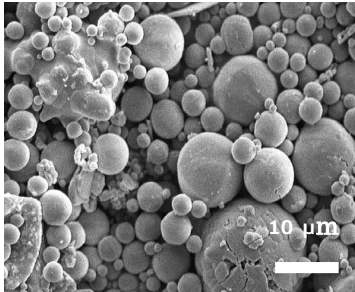
NAGASE & CO., LTD. (Chuo-ku, Tokyo; Representative Director and President: Kenji Asakura) and DIC Corporation (Chuo-ku, Tokyo; Representative Director, President & CEO: Kaoru Ino) have entered into an exclusive agreement for sales of the *CeramNex*TM AP10, a distinctive flake alumina filler that imparts heat dissipating properties to components for electronics equipment and other applications. The new product is scheduled for launch in January 2021. DIC aims to expand the range of products in the *CeramNex*TM AP10 lineup and to achieve sales of ¥800 million by 2025, focusing on automotive and electronics equipment component manufacturers in Japan, China, South Korea, Taiwan, Europe and the United States.

The growing importance of the CASE (Connected, Autonomous, Shared and Electric) ^{*1} concept and the deployment of the 5G cellular telecommunications standard continue to drive the trend toward ever-smaller components with more sophisticated performance features in both the automobile and electronics industries. As a consequence, the dissipation of heat generated inside equipment is an increasingly important consideration. Alumina fillers, which offer superb thermal stability, are used to impart heat dissipating properties to automotive and electronics equipment components. Compounding formulations involving a large amount of alumina filler are common because they add thermal conductivity to resin, but a high filler content hinders moldability and reduces the mechanical strength of the resulting molded components.

Unlike conventional alumina fillers comprising spherical or irregular particles, *CeramNex*TM AP10—which is synthesized using an original process—boasts excellent crystallinity and high aspect ratio ^{*2} flake-shaped particles. As a consequence, greater strength can be achieved with the addition of a smaller amount, thereby helping reduce weight. Moreover, superior surface uniformity means that DIC's new product is suitable as an additive for applications in areas other than the automobile and electronics industries.



Sheet alumina filler CeramNex AP10



Comparative evaluation of compounds with either CeramNex AP10 or granular alumina filler added

*1: CASE is an acronym of “Connected,” “Autonomous,” “Sharing & Services,” and “Electric.”

*2: Ratio of thickness compared to length and width. A higher aspect ratio tends to allow for a higher number of thermal conductive paths, improving thermal conductivity.

◆ Inquires

NAGASE & CO., LTD. <https://www.nagase.co.jp/english/>

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