

## Sumitomo Chemical Develops Aluminum Titanate DPF

Sumitomo Chemical announced that it has developed a proprietary aluminum titanate diesel particulate filter (“DPF”) used for filtering soot from the exhaust of vehicles with diesel engines.

With the rising worldwide awareness of environmental problems, developed countries are taking the initiative in producing clean vehicles that comply with regulations regarding exhaust gases such as NO<sub>x</sub>. Among developed countries, Europe in particular is seeing increasingly widespread use of vehicles with diesel engines that achieve superior fuel efficiency and low CO<sub>2</sub> emissions.

Europe’s Euro6 exhaust gas emissions regulation, one of the strictest in the world, is due to take effect in 2014, and DPFs are expected to become standard equipment on diesel-powered vehicles in Europe. In the future, DPFs will be used in an increasingly wide variety of vehicles, such as commercial and off-road vehicles, while exhaust gas regulations will also become stricter in emerging nations such as China and India as well as in Japan and the US, and these trends are expected to boost demand for DPFs globally.

Currently, silicon carbide (SiC) is used as the main material for making DPFs. Sumitomo Chemical has taken advantage of its proprietary technologies cultivated in its inorganic materials business, such as alumina products, to develop an aluminum titanate DPF, which outperforms SiC –based products in critical soot deposition amounts\*1 and thermal shock resistance\*2, both essential properties for DPFs.

Sumitomo Chemical plans to begin providing samples of its aluminum titanate DPF to automobile manufacturers in 2010 for evaluation of its practical application in vehicles. Following the completion of the evaluation, the Company intends to commence full-scale commercial production during 2015 or later, when use of DPFs in vehicles equipped with diesel engines is expected to come into full swing in Europe.

The development of the aluminum titanate DPF will enable Sumitomo Chemical to further develop and expand its inorganic materials business, on which the Company has been actively working over many years, into a variety of downstream industries while at the same time contributing to the solution of environmental problems involving exhaust gas emissions.

\*1 The amount of soot that can be continuously filtered.

\*2 The DPF’s ability to withstand sudden changes in temperature when it undergoes regeneration through incineration of the trapped soot.