

Sumitomo Chemical Expands Production and Research Capabilities for ArF Resists

Sumitomo Chemical Co., Ltd. today announced with regard to its business in ArF (argon fluoride) excimer laser resists (light-sensitive resins used in the manufacture of semiconductors) that it will construct a new dedicated facility at its Osaka Works and also introduce equipment for the evaluation of resists, including the latest ArF immersion resist scanner (for circuit exposure).

With the striking developments in the miniaturization of semiconductor circuits in recent years, ArF immersion resists are seeing a rising market as they increasingly come to replace ArF dry resists in state-of-the-art processes. The semiconductor industry is in a transitioning to processes for circuit line widths of 45nm, primarily for flash memory, and ArF immersion resists are increasingly becoming mainstream in the main processes. In addition, ArF immersion resists are expected to find uses not only in 45nm circuit lines, but also in lines as fine as 32nm as double patterning (double exposure) and similar technologies become established.

Sumitomo Chemical has consistently launched its state-of-the-art Sumiresist PAR[®] series ArF resists onto the market from the technology's earliest stages. In particular, the Company's ArF immersion resists, which can be used with or without a top-coat, have been evaluated favorably on the market and have been adopted by many semiconductor manufacturers. Sumitomo Chemical has also succeeded in developing high-performance photoacid generators (PAG) and other core materials for ArF immersion resists and seeks to start large-scale commercial production of products, including those that use these materials. Therefore, Sumitomo Chemical has decided on the construction of a new dedicated ArF resist production facility at its Osaka Works utilizing downflow-specification clean air technology along with the introduction of equipment for the evaluation of resists, including the latest ArF immersion resist scanner.

This expansion of Sumitomo Chemical's manufacturing and R&D capabilities will enable the Company to promptly develop, supply, and provide enhanced services for ArF resists to its customers in the semiconductor industry, primarily in Asia. Strengthening its business in the area of semiconductors will contribute to the further expansion of Sumitomo Chemical's core business of IT-related materials.

【Overview of Capital Investment】

- 1 . **Location:** Osaka Works
- 2 . **Capacity:** Approx. 100,000 gal./yr.
- 3 . **Details:** Dedicated ArF resist production facility, ArF immersion resist scanner equipment for the evaluation of resists.
- 4 . **Completion:** Evaluation equipment to commence operation in Q3 2008
New facility to be completed in Q4 2008