Development of Dye for Dual-Layer HD DVD Recordable Disc

Mitsui Chemicals, Inc. (MCI) today announced the development of a new organic dye for dual-layer HD DVD recordable disc (HD DVD-R DL). The dye was developed jointly with Yamamoto Chemicals, Inc. (YCI), which became a wholly owned MCI subsidiary on April 1 this year.

Today, high-definition televisions (HDTV) and DVD recorders are rapidly gaining in popularity due to the start of digital high-definition broadcasting and the streaming of large capacities of video data via the Internet. These events have given rise to demand for high-capacity optical discs that can record high-definition programs for an extended period.

Approved this year by DVD Forum, the international DVD standardization organization, HD DVD-R DL (30GB) can record 4 hours of high-definition programs. HD DVD-R format is expected to grow in popularity as the next generation DVD-R, because this new format disc is able to use the same manufacturing process as 4.7GB DVD-R, which can hold 2 hours of standard-definition video.

MCI and YCI have developed a new organic dye boasting superior recording properties that conforms to HD DVD-R DL standards. Based on knowledge of molecular design and organic synthesis technologies as well as media evaluation technology gained in the development of dyes for CD-R and DVD-R, this dye has outstanding recording and playback properties that make possible a low read error rate. What’s more, the dye has outstanding durability, enabling the stable playback of recorded data more than 1 million times. Sales of this dye are slated to begin this month.

In its Medium-term Business Plan, MCI aims to expand and grow the Performance Materials Sector, which consists of businesses including functional polymers, information and electronics materials and health-care materials. HD DVD-R dyes are part of the optical performance materials business within the information and electronic materials field.
Going forward, MCI and YCI intend to strengthen their collaboration to advance the development of HD DVD-R dyes offering even better performance. The two companies will also cooperate in popularizing the HD DVD format being promoted by the DVD Forum.

With regard to this announcement, Mr. Hisashi Yamada, Chief Fellow of Digital Media Network Company in Toshiba Corporation, has made following comments.

“I am very pleased that Mitsui Chemicals, Inc. created the pigment for HD DVD-R for Dual Layer/30 GB. A feature of HD DVD-R for Dual Layer is to be able to be manufactured as same process as current DVD. I am expecting user-friendly Disc will be served and the development of appropriate pigment for this will be helpful for the spread of HD DVD from now on.”

<Reference: Overview of YCI>
(1) Company Yamamoto Chemicals, Inc.
(2) Business Manufacture and sales of dyes (near infrared ray absorbing dyes, dyes for information recording paper, etc.), chemical intermediates (carriers for manufacturing hydrogen peroxide solution, etc.), and other products (organic fine chemicals, etc.)
(3) Established May 1948
(4) Paid-in capital ¥2,134 million
(5) Shareholder Mitsui Chemicals, Inc. (100%)
(6) President Satoshi Numata
(7) Employees Approx. 100
(8) Net sales ¥6,900 million (fiscal 2005 forecast)