

JMTC Enzyme commences sales of plant-origin D-lactic acid having high optical purity

JMTC Enzyme Corporation (JMTC Enzyme; Head Office: Chuo-ku, Tokyo; President & CEO: Satoshi Kamata) is pleased to announce that JMTC Enzyme has commenced sales of plant-origin D-lactic acid having high optical purity from June this year. It will be distributed by FUJIFILM Wako Pure Chemical Corporation (Head Office: Chuo-ku Osaka; President: Kazuo Shiraki).

The D-lactic acid to be released was produced from plant-origin materials with a fermentation process using proprietary genetically-modified fission yeast, and is characterized by high optical purity (99.5%ee). D-lactic acids are used as raw materials for bioabsorbable materials in the medical field, and they are also expected to be used as raw materials for biodegradable resin which is gathering attention as the solution to plastic waste problems. Use of D-lactic acid having high optical purity as the raw material may help produce polymers of higher quality.



D-Lactic Acid



D-Lactide (sample)

JMTC Enzyme is a joint venture established in March 2016 between Japan Material Technologies Corporation (JMTC; Head Office: Chuo-ku, Tokyo; CEO: Koyu Urata) and AGC Inc. (AGC; Head Office: Chiyoda-ku, Tokyo; President and CEO: Takuya Shimamura). Industrial production processes have been examined based on D-lactic acid fermentation technology which uses genetically-modified fission yeast developed by AGC. On this occasion, the D-lactic acid will go into commercial sales with small production and as a reagent grade, upon gaining confirmation of the Ministry of Economy, Trade and Industry in accordance with the Cartagena Act.

While examining to further expand the scale of the D-lactic acid, JMTC Enzyme will also advance industrialization of plant-origin malic acid having high optical purity which is also a potential raw material for bioabsorbable materials and biodegradable resin. The company is also planning productization of D-lactide which is an intermediate raw material of a polymer that guides D-lactic acid. The JMTC Group will continue to actively work on the commercialization of technologies related to biodegradable resin and technologies utilizing plant-origin raw materials, including the introduction of new technologies other than the technology mentioned in this press release.