

August 13, 2021

## Launch of XYDAR® LF-31P Low-Dielectric Liquid Crystal Powder (LCP) for Next-Generation High-Speed Communication

### Development of LCP with World's Best Level Dielectric Properties

ENEOS Corporation (President: Ota Katsuyuki; "ENEOS") announces that it launched XYDAR® LF-31P\*1, liquid crystal powder(LCP) with world's best level dielectric properties.

In recent years, the volume of communications is growing due to the development of new-generation communication technologies enabling greater miniaturization of semiconductor components in electronic devices. In light of these circumstances, development of highly efficient communication circuits is needed in order to curb decay of radio waves and other signals (transmission loss). To achieve this, LCP and other materials used in electronic devices require improvement in dielectric loss tangent\*2, which curbs the transmission loss.

The newly introduced XYDAR® LF-31P is characterized by fine and sharp particle size distribution, with an average particle size of 5 - 7µm. In performance, ENEOS's own technologies and combination expertise have realized a world's best level low-dielectric loss tangent of 0.0007. The product is expected to be highly effective in reducing transmission loss. Combined with its excellence in heat resistance and low water absorptivity, it is highly competitive as electrical and electronic material in high-speed communication.

In the ENEOS Group Long-Term Vision to 2040, the high-performance materials business is positioned as a growth business for developing and strengthening our technological capabilities. In this respect, LCPs business is one of the Group's priority areas responding to accelerated development of a data-driven society.

This initiative is consistent with United Nations Sustainable Development Goals (SDGs) 9. Industry, innovation and infrastructure. ENEOS is contributing to building a resilient infrastructure, promoting sustainable industrialization and fostering innovation by continuously providing innovative products.

\*1 XYDAR® is a registered trademark of SOLVAY SPECIALTY POLYMERS USA, LCC.

\*2 Lower numerical value indicates higher performance of the product.



XYDAR® LF-31P Low-Dielectric Liquid Crystal Powder (LCP)  
<https://www.eneos.co.jp/english/products/function/lcp/>