

2023.12.18

Mitsui Chemicals, Inc.

Mitsui Chemicals Develops Diffrar™ Optical Polymer Wafers for AR Glasses

The Lineup includes the world's first 8-inch polymer wafer for AR glasses

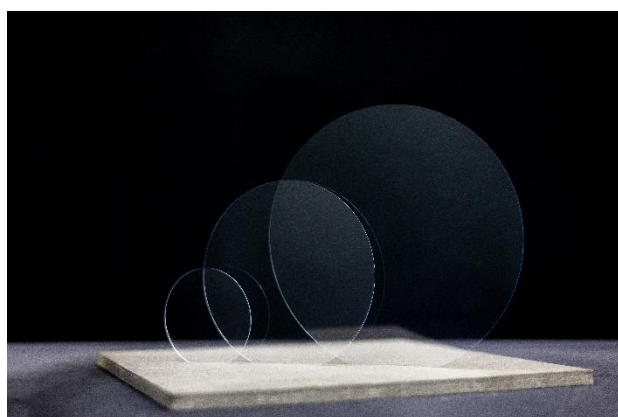
Mitsui Chemicals, Inc. (Tokyo: 4183; President & CEO: HASHIMOTO Osamu) has developed the Diffrar™ array of polymer wafers for waveguides used in augmented reality (AR) glasses, with a view to expand into the augmented and virtual reality markets.

Equipped with outstanding optical properties, including a high refractive index of 1.67 or higher and extreme flatness, Diffrar™ optical polymer wafers offer users of AR glasses a wide Field Of View (FOV). In addition, the material being polymer allows Diffrar™ to have greater impact resistance, making devices safer and lighter compared to glass.

The product lineup features wafers ranging from 3 inches to 8 inches in size, providing a variety of options for module manufacturing processes for AR and other devices. The 8-inch optical polymer wafer for AR glasses is the world's first product of this kind (according to our investigation).

The Meaning of Diffrar™

Derived from the word “diffraction” and the abbreviation of “AR,” the name Diffrar™ has been coined to express the value provided to customers where the “D” of the logo represents an opening door that to explore new products and providing value to customers.



* Diffrar™; 3-inch, 6-inch, 8-inch



<Inquiries regarding news release>

Mitsui Chemicals, Inc. ICT Materials Business Division

https://form.mitsuichemicals.com/business/diffrar_en