



Plant-derived superhigh-index lens material.

**Reduces total greenhouse gas by 14%
compared to petroleum-derived lens material.**

Bio-based

DoGreen™

A shift from petroleum-derived to plant-derived lens materials

Do Green™ MR-174™ helps reduce CO₂ emissions.

Features

- Do Green™ MR-174™ is a superhigh-index 1.74 lens made from plant-derived materials.
- This plant-derived lens material offers performance equivalent to conventional petroleum-derived products.
- JORA and USDA certified biomass products*1 *2
- Based on LCA (Life Cycle Assessment), this material reduces greenhouse gas emissions by 14% compared to conventional products based on petroleum-derived materials.*3

Premium optical quality

This material allows the production of high-quality lenses with less distortion.

Superhigh-index

Offering among the highest refractive indexes possible, this optical material can be used to produce light, thin lenses, even for strong prescriptions.

Properties

	Do Green™ MR-174™
R.I. (ne)	1.74
Abbe Number (ve)	32
Heat Distortion Temperature (°C)	78
Specific Gravity	1.47
Tintability	OK
Impact Resistance	OK

JORA biomass degree*1
30% to 40%



Biomass
No.140019

USDA biomass degree*2
82%



*1 JORA certification : Biomass mark indicating certification by the Japan Organic Recycling Association of environmental products recycled from bio-based resources (biomass) and meeting applicable quality regulations, standards, and criteria
Measurement method : Ratio of fossil fuel-derived carbon and biomass-derived ingredients

*2 USDA certification : Biomass mark indicating plant-derived certification by the United States Department of Agriculture (USDA BioPreferred®)
Measurement method : Proportions of biomass-based carbon vs. fossil-based carbon (14C content measurements are based on the ASTM-D6866-12 method)

*3 According to our Life Cycle Assessment (LCA) procedure

The values provided are representative measurements obtained by specific testing methods at Mitsui Chemicals. They are not guaranteed values

<https://jp.mitsuichemicals.com/en/special/mr/other/>



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