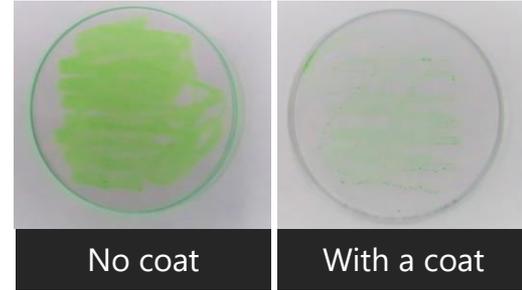


Evaporation Materials

Fluorine free water repellent coating material

OR-510

- Make water flow more easily
- Fluorine-free polymer design



Characteristic

- ◆ Water repellent: reduces the adhesion of water drops, water marks
- ◆ Antifouling: Improved wipability of ink, fingerprints, etc.
- ◆ Slipperiness : Improved slipperiness of water droplets
- ◆ Low refractive index: provides less impact on optical properties

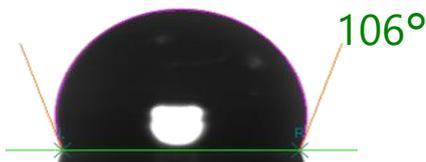
Basic Features

1. Contact angle: 106° (2.5 μL of pure water)
2. Sliding angle: 1° (30 μL of pure water)
3. Refractive index: 1.33(550 nm)
4. Recommended coat thickness: 6nm

Performance

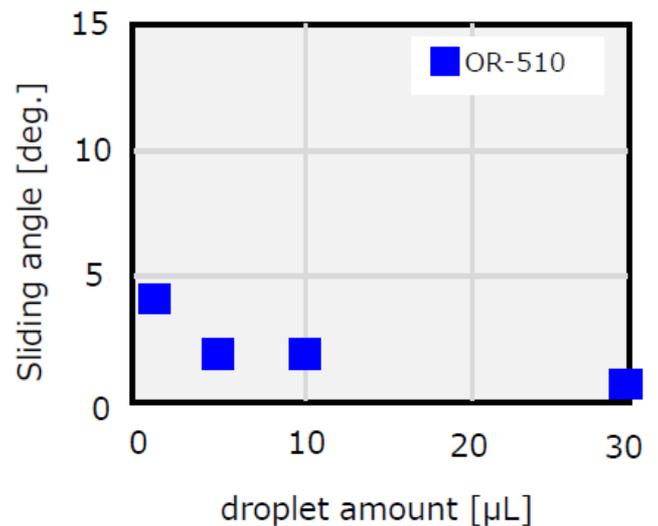
◆ Water repellency evaluation ◆

	Contact angle
No coat	25°
With a coat	106°



Appearance of water repellency after coating

◆ slipperiness evaluation ◆



Values described in this document are actual measurements, not product specification values.
Please make sure that this product is fit for purpose, including performing preliminary tests, before starting to use it.

Applications



Mobile



Glasses



Camera

Product Lineup

Product Name	Size	Size Corresponding to Evaporation System*
OR-510	Φ8×4t [mm]	≤Φ900 [mm]

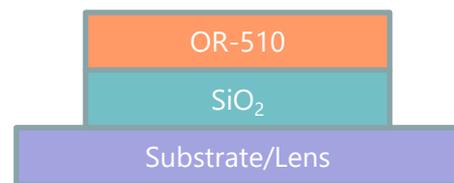
*The corresponding size is an approximation, and is not guaranteed.

Deposition Condition Examples

Deposition Conditions		
Chamber diameter	Φ900 [mm]	
Evaporation source	SiO ₂ : Electron beam OR-510: Resistance heating (W boat)	
Oxygen introduction	None	
Ion assist (IAD)	None	
Evaporating distance	900 [mm]	
Substrate heating	No heating	
Film thickness	SiO ₂ : to be terminated when deposition reaches 100Å OR-510: to be terminated when the light value on the monitor stops decreasing at a certain point	
Degree of vacuum at start of evaporation	1.0×10 ⁻³ [Pa] or lower	
Substrate to be vapor-deposited, size	Optical glass BK7 Φ30 ×t 3 [mm]	

SiO ₂ Electron beam Conditions			
	AMP.	Emission current [mA]	Time [min'sec]
Pre-melting	5.0	140→70	1'30"
Evaporation	5.0	Rate control (1 Å/sec)	Approximately 1'30"

OR-510 Resistance Heating Conditions		
	Current [A]	Time
Evaporation	70	(Until fully evaporated)



Film Structure

- All the data listed in this Pamphlet Data are either values measured by our company or quoted from the literature. However, we cannot accept any liability for any troubles or damage caused by using any of these data.
- In order to use the product safely and correctly, please first read the Product Safety Data Sheet.
- Pamphlet Data contained herein is the data as of December 2022.
- Note that the specifications of this Pamphlet Data and/or product appearance are subject to change for improvement, etc. without prior notice.
- We reserve all rights to this Pamphlet Data.
- Please contact us for any inquiries/requests about the product, for more details, or for product catalogs, etc.

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