

**MATERION**

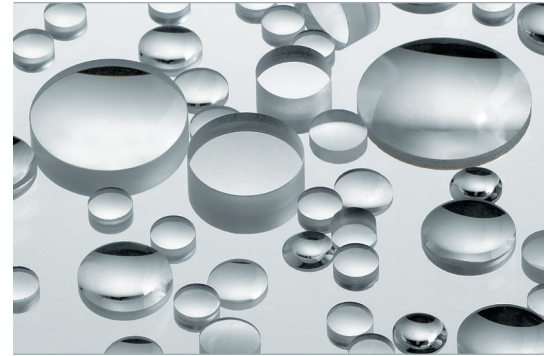
// BALZERS OPTICS

Iralin™ – Duolin™ – Supertriolin™

Broadband Anti-Reflection Coatings

Materion Balzers Optics offers a range of different anti-reflection coatings to cover a large field of applications:

- Multilayer AR-coatings designed for maximum efficiency in the visible range. Our Iralin™ family can be shifted either into the UV range down to 350 nm or into the near infrared up to 1100 nm.
- Duolin™ is laid out for the visible range plus an additional laser line. This can be any conventional low power laser.
- Supertriolin™ covers a very broad range of the spectrum between 450 nm up to 1100 nm. The bandwidth can even be extended as well at the cost of slightly higher reflectivity.
- All these coatings are useable for most commercial glass substrates.



Technical Data

Iralin 85™

Rabs. < 0.4%	450 – 650 nm	AOI = 0 – 15°
Ravg. < 0.3%	450 – 650 nm	AOI = 0 – 15°

Iralin 86™

Rabs. < 0.4%	400 – 610 nm	AOI = 0 – 15°
Ravg. < 0.3%	400 – 610 nm	AOI = 0 – 15°

The below mentioned coatings can be made to conform to many different applications by modifying band width

Iralin 87™

Rabs. < 0.5%	400 – 700 nm	AOI = 0 – 15°
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Duolin™

Ravg. < 0.5%	475 – 670 nm	AOI = 0 – 15°
Rabs. < 0.5%	1064 nm	AOI = 0 – 15°

other laser wave length are available on request

Supertriolin™

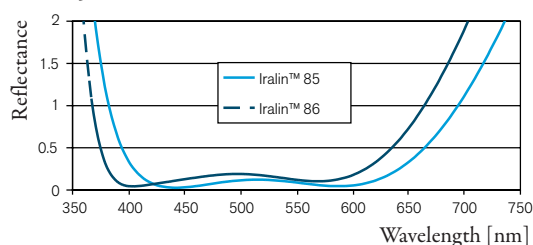
Ravg. < 0.8%	450 – 1100 nm	AOI = 0 – 15°
Rabs. < 1.3%	450 – 1100 nm	AOI = 0 – 15°

Environmental properties, according to MIL-C-675B

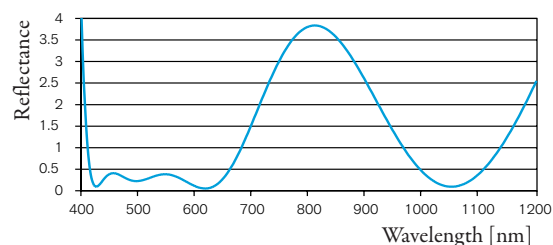
- para. 4.5.7 salt solution, 24 h in 4.5% NaCl
- para. 4.5.8 humidity, 24 h 49°C at > 95% r. H.
- para. 4.5.9 salt fog, 24 h in 4.5% NaCl
- para. 4.5.10 hardness, gum 40 strokes
- para. 4.5.11 hardness, cheesecloth 50 strokes
- para. 4.5.12 adherence, scotch tape test

Optics Balzers offers a range of different anti-reflexcoatings to cover a large field of applications.

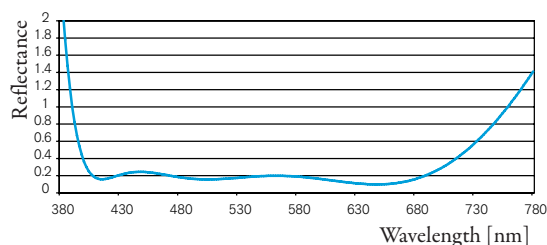
Iralin 85™ – Iralin 86™



Duolin™



Iralin 87™



Supertriolin™

