ARunic®



Colourless



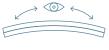
High level of hardness



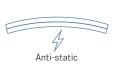
UV filter



Highly wear-resistant



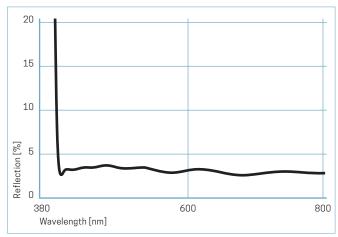
Achromatic







Reflection curve



Product structure



Properties

Reflection ≤3%	•
UV filter	•
Achromatic	•
Hard	•
Mechanical	
Highly wear-resistant	•
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Anti-static	
Chemical Water- and oil-repellent	•

Geometric

Alkali-resistant

Low-temperature process

Resistant to ultrasound

Drilling, opening	_
Highly convex	•

Quality tests

Mechanical resistance	Description	Results
Vibratory finishing (chemical- mechanical polishing)	2hours in a vibrating bowl with cylindrical ceramic abrasives ($\text{Al}_2\text{O}_3\text{)}$	Class 1
Scratch-Test	Test to establish the hardness and adhesiveness of the coating using a diamond tip and variable loads	MANAGER CHEST STATE STATE STATE OF THE STATE
Compliance with DIN-ISO 9211-4-02-02	Rapid pull off testing (~1 s) using adhesive tape 12-13 mm wide. Adhesive strength > 9.8 N per 25 mm	Class 0 "OK"

Chemical resistance

Chemical resistance		
"Thermal shock" test DIN-ISO 9211-4-04-12	$3\times$ 2-minute cycles in de-mineralised water at $100^{\circ}\text{C}.1$ minute in de-mineralised water at room temperature	Class 0 "OK"
Solubility DIN-ISO 9211-4-04-06	96 hours in a saline solution (45 g/l) at room temperature	Class 0 "OK"
Solvent resistance DIN-ISO 9211-3-12-3 and 9022-87-04-1	1 h hour in acetone (CH ₃ COCH ₃) at room temper- ature	Class 0 "OK"
Resistance to ultrasound	Alkali bath (3% "Galvex") for 2 hours at 60 °C and 50 W of ultrasonic power	Class 1 "Minimal colour change"
Resistance to sweat DIN-ISO 9022-86-02-1	7 days in an artificial sweat solution	Class 0 "OK"

Resistance to climatic conditions

Cold	16 hours at -55 °C	Class 0
DIN-ISO 9022-10-09-1		"OK"
Dry heat	6 hours at 85 °C with relative humidity of <40%	Class 0
DIN-ISO 9022-11-06-1		"OK"

Cleaning instructions

Please observe the following instructions on how to clean glasses that have been treated with an anti-reflective coating:

- Glasses can be cleaned easily in a neutral solution using ultrasound and at temperatures of up to 60 $^{\circ}\text{C}.$
- If cleaning by hand, we recommend wearing single-use, powder-free latex gloves and using a lint-free cloth.
- Use one of the following approved cleaning alcohols: Ethanol with 5% isopropyl alcohol (F25-A+IPA), Alcosuisse, Bern Ethanol Absolute A 15 0 (02883), Sigma-Aldrich, Buchs SG

