

SCHOTT® DentalGlass | New additions

Product Information

It is our constant concern to offer you the most comprehensive range of inorganic fillers. Therefore we want to present you with our new Zirconium containing glasses.

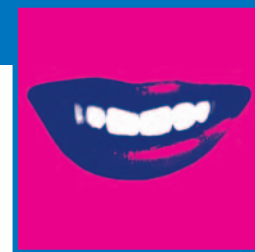
Advantages

- Greater variety of compositions and refractive indices
- Outstanding transparency
- Best radiopacities

Glass	Refractive index n_d													RO (digital method)					Remarks	Application					
	value	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	...1.83	value	0			400	800	1200	1600	2000
G018-307	1.50				●					NEW							340	■						Zr-containing, very low refractive index	Composite
G018-163	1.50				●												260	■						Sr- and F-containing, very low refractive glass	Composite
G018-093	1.51					●											330	■						Sr- and F-containing, low refractive glass	Composite
GM39923	1.52						●										560	■						Ba- and F-containing, low refractive glass	Composite
GM32087	1.52						●										370	■						Sr-containing, low refractive glass	Composite
G018-308	1.53							●		NEW							560	■						Zr-containing, low refractive glass	Composite
GM27884	1.53							●									560	■						Ba-containing, low refractive glass	Composite
GM31685	1.53							●									170	■						Low refractive index glass ceramic	Composite
G018-053	1.53							●									700	■						Ba- and F-containing, low refractive glass	Composite
8235	1.55								●								760	■						Ba-containing, without F	Composite
G018-186	1.55								●								800	■						Ba- and F-containing, high refractive glass	Composite
GM31684	1.58												●				410	■						High refractive index glass ceramic	Composite
G018-310	1.60									NEW				●			780	■						Zr-containing, high refractive index	Composite
G018-159	1.61													●			840	■						Sr- and Zr-containing, high refractive index	Composite
G018-161	1.83														●		2150	■						Extremely high radiopacity, Zr containing	Composite
GM35429	1.47	●															90	■						High fluoride containing Ca-glass	Glass ionomer cement
G018-090	1.51					●											460	■						High fluoride and Zn-containing Sr-glass	Glass ionomer cement, Compomer
G018-117	1.52						●										490	■						High fluoride and Zn-containing Sr-glass	Glass ionomer cement, Compomer

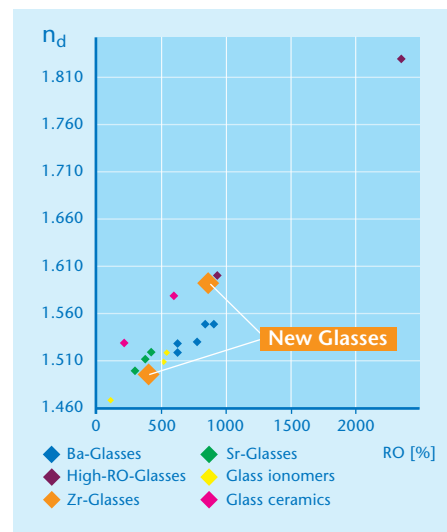
Range of glasses

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Materials Data:

		GO18-307	GO18-308	GO18-310
Index of refraction n_d	10 ⁻⁶	1.50	1.53	1.60
Expansion coefficient (-30/+70 °C)	10 ⁻⁶ /K	4	6.5	4.5
Density	g/cm ³	2	3	3
Transformation temperature (ISO7884-8)	°C	550	633	680
Radiopacity measured on the basis of ISO 4049 (digital measurement)	mm	Approx. (350%)	Approx. (560%)	Approx. (780%)
Hydrolytical resistance (DIN ISO 719)		1	1	1
Composition (approx. values) [weight-%]	SiO ₂	65	55	45
	B ₂ O ₃	15	10	-
	Al ₂ O ₃	< 5	< 10	20
	Li ₂ O	-	-	< 5
	K ₂ O	5	15	-
	Cs ₂ O	10	10	< 5
	ZnO	-	-	< 5
	La ₂ O ₃	5	10	20
	ZrO ₂	< 5	< 5	5
	Ta ₂ O ₅	-	-	< 5
	SnO	-	< 5	-



RO (digital measurement)

Grain sizes available:

Type	Description	Size	Grain size		Approx. Surface [m ² /g]
			d ₅₀ [µm]	d ₉₉ [µm]	
K	Standard grind	K1	30 ± 10	≤ 150	-
		K2	16 ± 4	≤ 100	-
		K3	10 ± 2	≤ 63	-
		K4	7 ± 1	≤ 40	-
		K5	5 ± 1	≤ 40	0.5
		K6	3 ± 1	≤ 40	0.6
SM	Special grind with narrow distribution	SM3.5	3.5 ± 1	≤ 13	2
UF	Special grind with narrow distribution and extremely low abrasion level	UF2.0	2.0 ± 0.25	≤ 12	3
		UF1.5	1.5 ± 0.25	≤ 5	5
		UF1.2	1.2 ± 0.2	≤ 5	7
		UF1.0	1.0 ± 0.2	≤ 4	8
		UF0.7	0.7 ± 0.2	≤ 3	13
		UF0.4	0.4 ± 0.1	≤ 3	23

Grain size description d₅₀ (d₉₉): Equivalent diameter, for which the distribution sum has the value of 50% (99%).

For more information:

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 glass made of ideas