Sitall (Glass Ceramics)

refraction, transmission per 10mm (with Fresnel reflection)

λ [nm]	no	T(λ) [%]
400.0		10.1
404.7	1.56387	20.2
435.8	1.55912	34.7
450.0		53.2
480.0	1.55415	58.9
486.1	1.55251	62.7
500.0		66.7
546.1	1.54899	74.2
550.0		75.2
587.6	1.54722	80.2
600.0		83.3
643.9	1.54409	85.6
650.0		86.0
656.3	1.54299	86.3
700.0		87.4
750.0		88.0
800.0		89.1
850.0		89.5
900.0		89.8
950.0		89.9
1000.0		90.0
1014.0	1.53545	90.0
1128.6	1.53379	90.1
1250.0		90.1
1529.6	1.52863	90.2
1813.0	1.52484	90.3
2000.0		90.4
2150.0		90.0
2200.0		89.7
2250.0		90.1
2300.0		90.5
2350.0		90.3
2400.0		90.1
2450.0		89.8
2500.0		82.0
2600.0		43.1
2700.0		8.90
2800.0		0.00

CTE@-50...+150°C

T, °C	ΔL/L
-50	-25×10^{-7}
-35	-18×10^{-7}
-20	-8×10^{-7}
0	0
10	4×10^{-7}
20	7×10^{-7}
30	6×10^{-7}
40	3×10^{-7}
45	0
50	-3×10^{-7}
75	-24×10^{-7}
100	-60×10^{-7}
150	-150×10^{-7}

Helium Permeability

T, °C	Pa m^3/s
0-100	$< 0.1 \times 10^{-11}$
100-200	$< 3 \times 10^{-11}$
200-300	$< 6 \times 10^{-11}$
300-400	$< 9 \times 10^{-11}$

Density 2.55 g/cm^3

dispersion

λ [nm]	ν(λ)
e-line 546.1	54.6
d-line 587.6	55.0

The Sitall is glass cermaics, consists of crystalline and amorphous phases, and has equal homogenity in 3D. There are two types of the Sitall: standard grade (CO) and laser grade (LG). We offer both types preformed and prepolished.

recommended polishing slurries
- OXAPA BS SP
- OXAPA BS 69
- OXAPA BS N
- OXAPA BS PLUS
- OXAPA BS NANO *for finishing*
- OXAPA D *for standard polishing and finishing*
- OXAPA AL
- OXAPA SOL

recommended polishing pads
- OXAPA polishing pad hard 03, 1, 8
- OXAPA polishing pad intermediate 5, 11, 12
- OXAPA polishing pad soft 4, 19 *for finishing*

recommended polishing pitches
- OXAPA PP 15-45