

Fused silica KU1(0.17...2.2µm), KUVI(0.18...3.5µm)

KU1			KUVI	
refraction, internal transmission per 10mm				
λ [nm]	n	T(λ) [%]	n	T(λ) [%]
170.0	1.615	97.8	1.615	50.7
185.0	1.57502	99.2	1.57509	97.9
194.2	1.55892	99.3	1.55899	99.0
214.4	1.53372	99.6	1.53379	99.6
280.3	1.49404	99.9	1.49409	99.9
302.2	1.48719	99.9	1.48724	99.9
365.0	1.47454	99.9	1.47460	99.9
404.7	1.46962	99.9	1.46967	99.9
435.8	1.46662	99.9	1.46675	99.9
546.1	1.46008	99.9	1.46014	99.9
587.6	1.45846	99.9	1.45852	99.9
589.3	1.45840	99.9	1.45847	99.9
643.8	1.45670	99.9	1.45676	99.9
656.3	1.45637	99.9	1.45643	99.9
706.5	1.45515	99.9	1.45521	99.9
852.1	1.45247	99.9	1.45253	99.9
1014.0	1.45024	99.9	1.45030	99.9
1083.0	1.44941	99.9	1.44947	99.9
1128.7	1.44887	99.8	1.44893	99.8
1395.1	1.44584	99.8	1.44590	99.8
1709.1	1.44208	99.9	1.44214	99.9
1813.1	1.44070	99.9	1.44076	99.9
2058.1	1.43722	99.9	1.43730	99.9
2437.4	1.43095	95.0	1.43102	99.5
2500.0		79.2		99.2
2720.0		3.00		95.5
2800.0		5.00		93.5
2900.0		72.0		91.0
3000.0		81.0		88.0
3100.0		83.0		86.8
3243.9	1.41312	85.0	1.41319	86.0
3302.6	1.41154	86.0	1.41162	87.5
3507.0	1.40568	70.0	1.40575	70.0
3706.7	1.39929	31.1	1.39937	31.1
3750.0		18.0		18.0
3910.0		18.5		18.5
4000.0		15.0		15.0
4220.0		5.00		5.00
4300.0		0.70		0.70
4400.0		0.00		0.00
dispersion				
λ [nm]	v(λ)		v(λ)	
e-line 546.2	67.7		67.7	
d-line 587.7	67.8		67.8	

The high quality synthetic fused silica of both types KU1 and KUVI for standard optical as well as for high power laser applications is available preformed and prepolished. KU1 is mainly used for the wavelengths in the UV-range. KUVI is the broad band fused silica with good transmission between 2µm and 3.5µm and the rest absorption below 1ppm/cm at 1000...1100nm.

density: 2.23 g/cm³
CTE@0-200°C: 5.5x10⁻⁶/K1100nm.

recommended polishing slurries

- OXAPABS SP
- OXAPABS 69
- OXAPABS N
- OXAPABS PLUS
- OXAPABS NANO *for finishing*

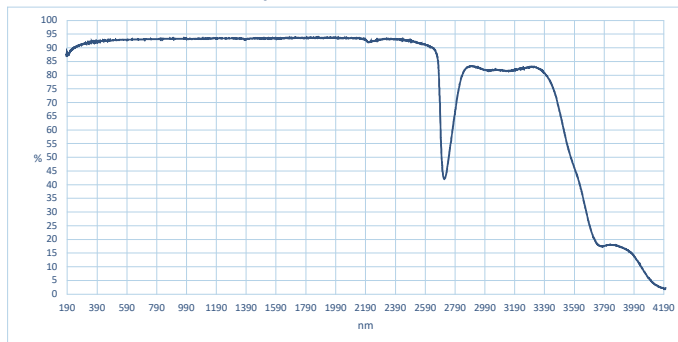
recommended polishing pads

- OXAPA polishing pad hard 8
- OXAPA polishing pad intermediate 5
- OXAPA polishing pad soft 4, 19 *for finishing*

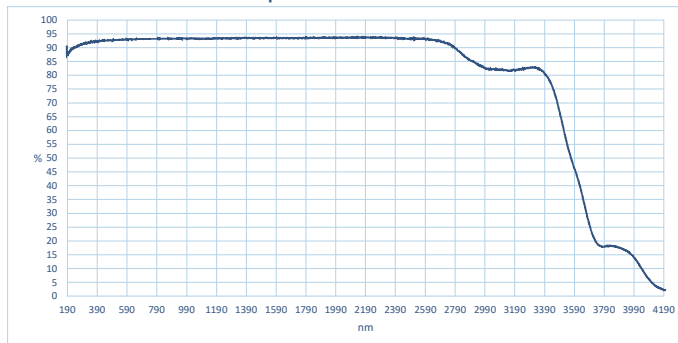
recommended polishing pitches

- OXAPAPP 15-45

KU1 transmission per 10mm incl. Fresnel reflection



KUVI transmission per 10mm incl. Fresnel reflection



Raw substrates from fused silica KU1

prices (EUR/pc) for substrates from stock (1-20pcs)

sizes, mm	price, EUR	sizes, mm	price, EUR	rejected wafers, occasional items	
				sizes, mm	price, EUR
dia 12.5 x 2.8	0.62	50.0 x 50.0 x 6.3	19.49		
dia 22.35 x 4.3	2.10	50.0 x 50.0 x 8.3	25.48	127 x 127 x 2.3	20.00
dia 25.0 x 2.3	1.48	80.0 x 80.0 x 1.0	10.74	152 x 152 x 2.3	28.00
dia 25.0 x 3.3	2.08	80.0 x 80.0 x 2.0	18.97	152 x 152 x 3.0	29.00
dia 25.0 x 5.3	3.25	80.0 x 80.0 x 3.0	26.81	152 x 152 x 6.35	35.00
dia 25.0 x 6.3	3.79	80.0 x 80.0 x 4.0	33.34	dia 184 x 3.8	35.00
dia 30.0 x 5.3	4.73	80.0 x 80.0 x 5.0	43.08		
dia 34.0 x 5.3	6.05	80.0 x 80.0 x 6.0	51.62		
dia 36.0 x 5.3	6.74	80.0 x 80.0 x 7.0	59.15		
dia 37.0 x 7.3	9.85	80.0 x 80.0 x 8.0	65.89		
dia 38.0 x 2.3	4.25	80.0 x 80.0 x 9.0	72.62		
dia 38.1 x 2.3	4.27	80.0 x 80.0 x 10.0	79.36		
dia 38.1 x 3.3	5.22				
dia 38.1 x 6.7	10.32				
dia 38.1 x 10.1	14.39				
dia 48.0 x 7.3	16.30				
dia 50.0 x 6.3	15.19				
dia 50.0 x 8.3	20.10				
dia 50.8 x 9.8	24.61				
dia 55.0 x 2.3	8.84				
dia 62.0 x 9.8	36.39				
dia 63.5 x 6.3	24.65				
dia 63.5 x 8.3	32.23				
dia 63.5 x 10.3	39.82				
dia 76.2 x 10.3	57.34				

size tolerance +/-0.1mm
thickness tolerance +/-0.1mm
other sizes are possible by request
prices for charges above 20pcs are calculated by request