

Optical glasses almost bubble-free, even in the standard grade

SCHOTT Advanced Optics brings **premium quality** to a **standard level**



- § No difference between B0 and B1 anymore.
- § All glasses fulfill standard quality!
- § New standard grade is equivalent with the old B0 grade.
- § All former glasses with grade B1 now fulfill the new standard (former B0).

Old bubble classes

Bubble class	B0	B0	B0	B1	B1	B1
Quality step		VB	EVb		VB	EVb
Max. cross section mm ² per 100 ccm	0.03	0.01	0.006	0.1	0.03	0.02
Max. quantity per 100 ccm	10	4	2	30	10	4
Max. all. diam.						
	50	0.10	0.10	0.10	0.15	0.15
	100	0.15	0.15	0.10	0.20	0.15
	200	0.20	0.15	0.10	0.30	0.20
	300	0.25	0.20	0.10	0.40	0.25
	500	0.40			0.60	
	800	0.55			0.80	

Valid for bubbles > 0.03 mm dia.!!!



New bubble classes comprise only three grades

Quality of Bubbles	Standard	VB	EVb
Max. cross section mm ² per 100 ccm	0.03	0.02	0.006
Max. quantity per 100 ccm	10	4	2

New Bubble Grades: What does this mean for the largest acceptable bubble diameter?

Quality of Bubbles	Standard	VB	EVB
Max. cross section mm ² per 100 ccm	0.03	0.02	0.006
Max. quantity per 100 ccm	10	4	2

Valid for bubbles > 0.03 mm dia.!!!

§ The largest acceptable diameter is defined within the maximum allowed cross section. Attached is a sample calculation for different total volumens.

	Standard	VB	EVB
Max. cross section mm ² per 100 ccm	0.03	0.02	0.006
Volume [ccm]	Max. allowable diameter of a single bubble [mm]		
800	0.55	0.45	0.25
500	0.44	0.36	0.20
300	0.34	0.28	0.15
200	0.28	0.23	0.12
100	0.20	0.16	0.09
50	0.14	0.11	0.06

or a number of smaller bubbles with total cross section not larger than given in the grade.

