

Non-browning Glass

S-BSL7R S-BAL35R PBM2R

Sometimes it is necessary to install optical devices such as camera in radiation environment for observation in detail. In such case, if the lens or prisms made of standard optical glass, they can be colored and unusable if the radiation is too strong. Our Non-browning Glass has made of special composition that allows it withstand such coloring.

◆ Properties

Properties			S-BSL7R	S-BAL35R	PBM2R
Optical property	Refractive index	n_c (656nm)	1.51385	1.58618	1.61504
		n_d (588nm)	1.51633	1.58913	1.62004
		n_F (486nm)	1.52193	1.59584	1.63207
		n_g (436nm)	1.52627	1.60108	1.64201
	Abbe number	ν_d	63.89	60.95	36.41
	Transmittance (nm) (80%/5%)	t10mm	410 / 365	450 / 385	445 / 380
Chemical property	Water resistance (Powder method) RW(P)*		Class 2	Class 1	Class 1
	Acid resistance (Powder method) RA(P)*		Class 1	Class 3	Class 1
Thermal property	Transition point Tg (°C)		589	668	441
	Yield point At (°C)		649	719	485
	CTE α ($\times 10^{-7}/K$) (100°C~300°C)		83	67	98
Mechanical property	Knoop hardness Hk*		580 [6]	590 [6]	410 [4]
	Abrasion degree Aa*		93	113	169
Other	Specific gravity d		2.50	3.30	3.59

*JOGIS

* All properties were measured in room temperature (Except thermal property).

* Above specs might be changed by technology development.

* Please contact us for radiation-resistant glass with other optical constants.

◆ Product specifications

* Please contact us for details



HQ • Factory : 15-30, OYAMA 1-CHOME, CHUO-KU, SAGAMIHARA-SHI, KANAGAWA 252-5286 JAPAN

TEL : 042-772-5117 FAX : 042-774-1799

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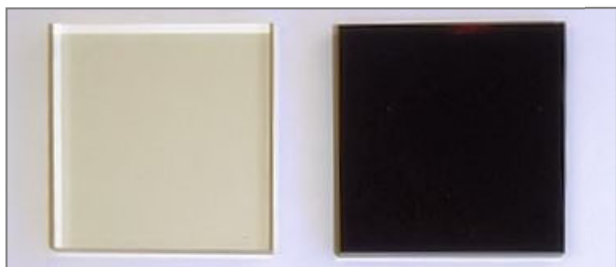
◆ Coming line ups

Properties			S-BSL7R	S-BAL35R	PBM2R	TRY123 (PBM8R)	TRY124 (S-BSM22R)
Optical property	Refractive index	n_d (588nm)	1.51633	1.58913	1.62004	1.59551	1.62230
	Abbe number	ν_d	63.89	60.95	36.41	39.40	53.18
	Transmittance (nm) (80%/5%)	10mm	410 / 365	450 / 385	445 / 380	430 / 375	485 / 410
Other	Specific gravity d		2.50	3.30	3.59	3.36	3.24

* All properties were measured in room temperature (Except thermal property).

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◆ Radiation test



S-BAL35R

S-BAL35 (General optical glass)

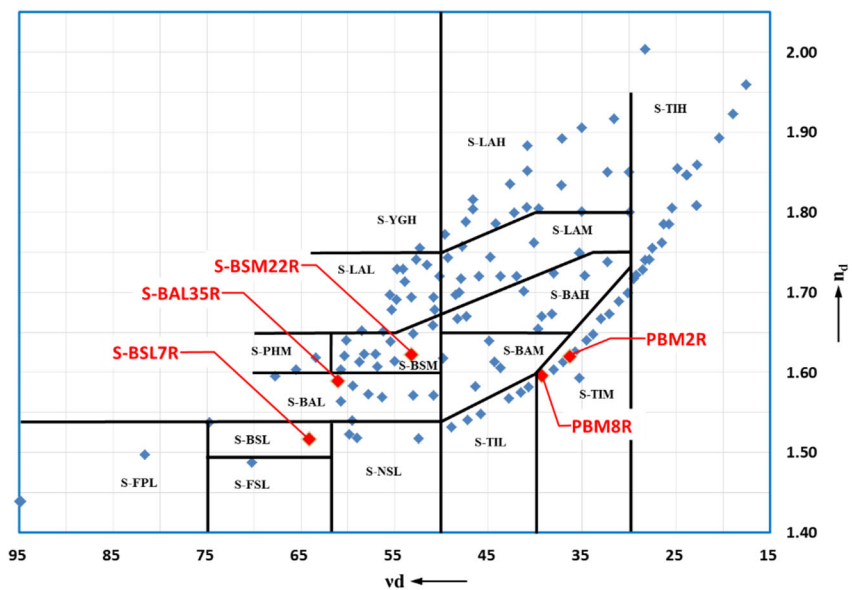
<Reference> γ ray (2MGy) After radiation

Transmittance (500nm)

S-BAL35R : 82%

S-BAL35 (Standard) : 1%

◆ Index map of Non-browning glass



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