DATA SHEET

LEAD GLASS
(X-RAY PROTECTION)

SHIELDING CHARACTERISTICS

Thickness	minimum lead equivalence (mm) for stated X-ray tube voltage							Max. plate mass	
mm	100kV	110kV	150kV	200kV	250kV	300kV		ibs/sq.ft	kg/m²
3.5 – 5.0	1.2	1.2	1.0	0.9	0.9	0.9		24.0	4.9
5.0 – 6.5	1.7	1.6	1.5	1.3	1.3	1.3		31.2	6.4
7.0 – 8.5	2.3	2.3	2.1	1.8	1.8	1.8		40.8	8.4
8.5 – 10.0	2.8	2.8	2.5	2.2	2.2	2.2		48.0	9.8
10.0 – 12.0	3.2	3.2	2.9	2.5	2.5	2.5		57.6	11.8
11.0 – 13.0	3.6	3.6	3.3	2.8	2.7	2.8		62.4	12.8
14.0 – 16.0	4.6	4.6	4.3	3.5	3.5	3.6		76.8	15.7

OPTICAL PROPERTIES

Refractive index n_d	1.76
Transmission % @ 550mm through 5mm path	> = 85.0

CHEMICAL PROPERTIES

Lead (Pb)	48%
Barium (Ba)	15%

MECHANICAL PROPERTIES

Specific gravity (g/cm³)	4.8
Knoop hardness (kg/mm²)	4.40
Young's modulus (Gpa)	62.7
Poisson's ratio	0.23
Coefficient of thermal expansion (x10-7/°C)	81.8

WHILE EVERY ATTEMPT HAS BEEN MADE TO VERIFY THE SOURCE OF THE INFORMATION, NO RESPONSIBILITY IS ACCEPTED FOR ACCURACY OF DATA.

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