

	MIL-G-174B (5dec86)	OP3.001:2001(0223)	10110-2:1996(0315)	10110-3:1996(????)	10110-4:1997(0801)	10110-4:2002(US08) Proposal to replace parts 2, 3, and 4 (H. Pollicove)	12123:2008(DIS)	Schott	Hoya
Stress Birefringence	≤ 10 nm/cm	No Classes Defined No notation prescribed Specify max nm/cm	No classes defined Specify max nm/cm Indicate: 0/ x nm/cm Default: 0/ 20 Just some typical apps and their	-----	-----	No classes defined Specify max nm/cm Indication: 0/x nm/cm Default: NONE	≤ 2 nm/cm ≤ 4 nm/cm ≤ 6 nm/cm ≤ 12 nm/cm <20 nm/cm ≥20 nm/cm	SSK ≤ 4 nm/cm SK ≤ 6 nm/cm + ≤ 10 nm/cm	1 ≤ 4 nm/cm 2 ≤ 9 3 ≤ 19 nm/cm 4 ≥ 20 nm/cm
Bubbles and Inclusions	0 00.03 mm ² /100ml [0.20, 0.06] 1 00.12 mm ² /100ml [0.39, 0.06] 2 00.25 mm ² /100ml [0.57, 0.06] 3 00.50 mm ² /100ml [0.80, 0.06] 5 00.20 mm ² /100ml [0.05, 0.02] 10 00.80 mm ² /100 ml [0.10, 0.03] 15 01.80 mm ² /100 ml [0.15, 05] 20 03.15 mm ² /100 ml [0.20, 0.05] 30 07.10 mm ² /100 ml [0.30, 0.10] 40 12.60 mm ² /100 ml [0.40, 0.10] 50 19.70 mm ² /100 ml [0.50, 0.10]	Total area of diam>0.05mm IG4 [0.00, 0.03] IG3 (0.03, 0.10] IG2 (0.10, 0.25] IG1 (0.25, 0.50] IG0 (0.50, 0.99] Indicate: Default: NONE	-----	-----	No Classes Defined Specify directly Accumulation applies Suggested sqr(area) Indication: 1/ N x A Default: 1/ 3 x 0.16, etc.	Total area of diam > 0.05mm IG4 [0.00, 0.03] IG3 (0.03, 0.10] IG2 (0.10, 0.25] IG1 (0.25, 0.50] IG0 (0.50, 0.99] Indication: 1/IGx Default: NONE	Total area of bubbles ≥ 0.03mm AND/OR Max number of specified sized 10 x 0.03 mm ² /100 cm ³ 30 x 0.10 70 x 0.25 140 x 0.50	B0-EVB 0.006 mm ² & ≤ 2 B0-VB 0.010 mm ² & ≤ 4 B1-EVB 0.020 mm ² & ≤ 4 B1-VB 0.030 mm ² & ≤ 10 B0 0.030 mm ² & ≤ 10 B1 0.100 mm ² & ≤ 30	C1 ≤ 0.11 mm ² /100ml C2 < 25 mm ² /ml C3 < 0.49 mm ² /100ml C4 < 100 mm ² /ml
Inhomogeneity		HG5 ± 0.5 ppM HG4 ± 1.0 ppM HG3 ± 2.0 ppM HG2 ± 5.0 ppM HG1 ± 20.0 ppM Indicate: Default: NONE	-----	-----	5 ± 0.5 ppM 4 ± 1.0 ppM 3 ± 2.0 ppM 2 ± 5.0 ppM 1 ± 20.0 ppM 0 ± 50.0 ppM Indication: 2/x; - Default: 2/ 1; 1	HG5 ± 0.5 ppM HG4 ± 1.0 ppM HG3 ± 2.0 ppM HG2 ± 5.0 ppM HG1 ± 20.0 ppM Indication: 2/HGx; - Default: NONE	± 1 ppM ± 2 ppM ± 4 ppM ± 10 ppM ± 40 ppM ± 100 ppM	H5 ± 0.5 ppM H4 ± 1 ppM H3 ± 2 ppM H2 ± 5 ppM H1 ± 20 ppM	H5 ± 0.5 ppM H4 ± 1 ppM H3 ± 2 ppM H2 ± 5 ppM H1 ± 20 ppM
Striae	A no visible striae B light and scattered C light D more or heavier than C	A No visible Striae B Light difficult few C Light easy to see scattered D Pervasive Indicate: Default: NONE	-----	-----	Areal fraction 5 extremely clear 4 ≤ 1% ≥ 30nm/cm 3 ≤ 2% 2 ≤ 5% 1 ≤ 10% Indication: 2/ - ; x Default: 2/ 1; 1	A No visible Striae B Light difficult few C Light easy to see scattered D Pervasive Indication: 2/ - ; x Default: NONE	< 2 nm/cm < 3 nm/cm < 6 nm/cm < 12 nm/cm	Areal fraction 5 extremely clear 4 ≤ 1% ≥ 30nm/cm 3 ≤ 2% 2 ≤ 5% 1 ≤ 10%	A no visible striae B light and scattered C light D more or heavier than C
Abbe Value	By Abbe Value 0.7% 0.9% 1.0%	AVG3 ± 0.2% AVG2 ± 0.3% AVG1 ± 0.5% AVG0 ± 0.8% Indicate: Default: NONE	-----	-----	-----	AVG3 ± 0.2% AVG2 ± 0.3% AVG1 ± 0.5% AVG0 ± 0.8% Indication: abbe AVGx Default: AVG0	± 0.2% ± 0.3% ± 0.5% ± 0.8%	± 0.2% ± 0.3% ± 0.5% ± 0.8%	± 0.3% ± 0.8%
Refractive Index	By index 1000 ppM 1500 ppM 2000 ppM	RIG3 ± 0.0002 RIG2 ± 0.0003 RIG1 ± 0.0005 RIG0 ± 0.0010 Indicate: Default: NONE	-----	-----	-----	RIG3 ± 0.000 2 RIG2 ± 0.000 3 RIG1 ± 0.000 5 RIG0 ± 0.001 0 Indicate: index RIGx Default: NONE	± 0.000 2 (200 ppM) ± 0.000 3 (300 ppM) ± 0.000 5 (500 ppM) ± 0.001 0 (1000 ppM) ± 0.002 0 (2000 ppM)	± 0.000 2 (200 ppM) ± 0.000 3 (300 ppM) ± 0.000 5 (500 ppM)	± 0.000 2 (200 ppM) ± 0.000 5 (500 ppM)