



Glass Standard Collection

1. Al-Mg-P NBS Trace Glass (K-1013) – 13 Elements

Element:	Al ₂ O ₃	MgO	P ₂ O ₅	O	TiO ₂	Cr ₂ O ₃	NiO	GeO ₂	ZrO ₂	BaO	Eu ₂ O ₃	ThO ₂	UO ₂
X-Ray:	ka	ka	ka	ka	ka	ka	ka	ka	la	la	la	ma	ma
Oxide Wt%:	11.488	9.718	73.92	1.348	0.35	0.205	0.394	0.49	0.608	0.581	0.614	0.114	0.17
Elemental Wt%:	6.08	5.86	32.26	53.05	0.21	0.14	0.31	0.34	0.45	0.52	0.53	0.1	0.15

2. U-2 Glass 806 with 10% Uranium Dioxide

Element:	SiO ₂	CaO	MgO	UO ₂	O
X-Ray:	ka	ka	ka	ma	ka
Oxide Wt%	49.933	23.227	16.749	10.006	0.026
Elemental Wt%:	23.34	16.6	10.1	8.82	41.08

3. REE-1 Glass with 4 Rare Earths

Element:	Al ₂ O ₃	SiO ₂	CaO	Eu ₂ O ₃	Gd ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	O
X-Ray:	ka	ka	ka	la	la	la	la	ka
Oxide Wt%:	30.521	26.96	25.16	4.2	4.459	4.35	4.35	-0.002
Elemental Wt%:	16.153	12.602	17.982	3.627	3.869	3.779	3.809	38.178

4. Rare Earth Glass A with Lithium

Element:	Ce ₂ O ₃	Li ₂ O	B ₂ O ₃	O
X-Ray:	la	ka	ka	ka
Oxide Wt%:	20	24.02	55.982	-0.003
Elemental Wt%:	17.075	11.157	17.386	54.381

5. Corning X Glass – 14 Elements

Element:	SiO ₂	Al ₂ O ₃	CaO	MgO	B ₂ O ₃	Rb ₂ O	ZrO ₂	SrO	Y ₂ O ₃	PbO	ZnO	UO ₂	NiO	O
X-Ray:	ka	ka	ka	ka	ka	la	la	la	la	ma	ka	ma	ka	ka
Oxide Wt%	56.903	17.551	6.24	8.699	4.35	0.5	0.761	0.781	0.79	0.75	0.79	0.76	0.73	-0.003
Elemental Wt%	26.598	9.289	4.46	5.246	1.351	0.457	0.563	0.66	0.622	0.696	0.635	0.67	0.574	47.781

6. Corning W Glass – 14 Elements

Element:	SiO ₂	Al ₂ O ₃	CaO	MgO	B ₂ O ₃	Cs ₂ O	V ₂ O ₃	MnO	Cu ₂ O	CoO	BaO	La ₂ O ₃	ThO ₂	O
X-Ray:	ka	ka	ka	ka	ka	la	ka	ka	ka	ka	la	la	ma	ka
Oxide Wt%:	56.9	17.54	6.231	8.689	4.389	0.72	0.65	0.65	0.68	0.72	0.78	0.79	0.79	-0
Elemental Wt%:	26.6	9.283	4.453	5.24	1.363	0.679	0.44	0.5	0.6	0.57	0.7	0.674	0.694	47.73

7. Corning V Glass – 12 Element

Element:	SiO ₂	Al ₂ O ₃	CaO	MgO	FeO	K ₂ O	TiO ₂	Cr ₂ O ₃	Ce ₂ O ₃	HfO ₂	B ₂ O ₃	O
X-Ray:	ka	ka	ka	ka	ka	ka	ka	ka	la	la	ka	ka
Oxide Wt%:	57.703	17.791	6.32	8.811	0.71	0.83	0.801	0.76	0.74	0.741	4.44	-0.005
Elemental Wt%:	26.972	9.416	4.517	5.313	0.552	0.689	0.48	0.52	0.632	0.628	1.379	48.544