

Bond-valence tables of $KRE(\text{MoO}_4)_2$ compounds. Bond-valence units are in valence unit and length are in Å. R_0 and B values are from Brown and Altermatt, (1985), Acta Cryst. B41, 244-247 and Brese and O'Keeffe, (1991), Acta Cryst. B47, 192-197.

KTb(MoO₄)₂

Bond Valence Calculations					
	Tb ₁	Mo ₁	K ₁	Sum	V - Sum
O ₁	0.949	1.361	0.314	1.99	-0.01
O ₂	1.290	1.176		1.82	-0.18
O ₃	0.872	1.460	0.078	1.90	-0.10
O ₄		1.662	0.806	2.06	0.06
Sum	3.11	5.66	1.20		

Bond Lengths			
	Tb ₁	Mo ₁	K ₁
O ₁	2.308	1.793	2.817
O ₂	2.399, 2.511	1.847	
O ₃	2.339	1.767	3.330
O ₄		1.719	2.684, 2.771

	Tb-O	Mo-O	K-O
R_0	2.032	1.907	2.132
B	0.37	0.37	0.37

KDy(MoO₄)₂

Bond Valence Calculations					
	Dy ₁	Mo ₁	K ₁	Sum	V - Sum
O ₁	0.911	1.354	0.318	1.97	-0.03
O ₂	1.227	1.182		1.80	-0.20
O ₃	0.833	1.464	0.074	1.92	-0.08
O ₄		1.658	0.816	2.07	0.07
Sum	2.97	5.66	1.21		

Bond Lengths			
	Dy ₁	Mo ₁	K ₁
O ₁	2.292	1.795	2.812
O ₂	2.384, 2.502	1.845	
O ₃	2.325	1.766	3.352
O ₄		1.720	2.770, 2.676

	Dy-O	Mo-O	K-O
R ₀	2.001	1.907	2.132
B	0.37	0.37	0.37

KHo(MoO₄)₂

Bond Valence Calculations					
	Ho ₁	Mo ₁	K ₁	Sum	V - Sum
O ₁	0.999	1.346	0.312	2.00	0.00
O ₂	1.335	1.157		1.82	-0.18
O ₃	0.916	1.480	0.069	1.97	-0.03
O ₄		1.640	0.807	2.07	0.07
Sum	3.25	5.62	1.19		

Bond Lengths			
	Ho ₁	Mo ₁	K ₁
O ₁	2.282	1.797	2.819
O ₂	2.372, 2.501	1.853	
O ₃	2.314	1.762	3.380
O ₄		1.724	2.775, 2.680

	Ho-O	Mo-O	K-O
R ₀	2.025	1.907	2.132
B	0.37	0.37	0.37

KEr(MoO₄)₂

Bond Valence Calculations					
	Er ₁	Mo ₁	K ₁	Sum	V - Sum
O ₁	0.906	1.368	0.324	1.98	-0.02
O ₂	1.244	1.176		1.80	-0.20
O ₃	0.854	1.460	0.064	1.92	-0.08
O ₄		1.644	0.815	2.05	0.05
Sum	3.00	5.65	1.20		

Bond Lengths			
	Er ₁	Mo ₁	K ₁
O ₁	2.281	1.791	2.805
O ₂	2.370, 2.478	1.847	
O ₃	2.303	1.767	3.403
O ₄		1.723	2.770, 2.677

	Er-O	Mo-O	K-O
R ₀	1.988	1.907	2.132
B	0.37	0.37	0.37

KYb(MoO₄)₂

Bond Valence Calculations					
	Yb ₁	Mo ₁	K ₁	Sum	V - Sum
O ₁	0.913	1.368	0.307	1.98	-0.02
O ₂	1.207	1.182		1.79	-0.21
O ₃	0.854	1.480		1.91	-0.09
O ₄		1.631	0.790	2.03	0.03
Sum	2.97	5.66	1.10		

Bond Lengths			
	Yb ₁	Mo ₁	K ₁
O ₁	2.255	1.791	2.826
O ₂	2.351, 2.476	1.845	
O ₃	2.280	1.762	
O ₄		1.726	2.687, 2.784

	Yb-O	Mo-O	K-O
R ₀	1.965	1.907	2.132
B	0.37	0.37	0.37

KLu(MoO₄)₂

Bond Valence Calculations					
	Lu ₁	Mo ₁	K ₁	Sum	V - Sum
O ₁	0.954	1.361	0.324	2.00	0.00
O ₂	1.278	1.182		1.82	-0.18
O ₃	0.894	1.468		1.91	-0.09
O ₄		1.689	0.808	2.09	0.09
Sum	3.13	5.70	1.13		

Bond Lengths			
	Lu ₁	Mo ₁	K ₁
O ₁	2.245	1.793	2.805
O ₂	2.344, 2.450	1.845	
O ₃	2.269	1.765	
O ₄		1.713	2.770, 2.683

	Lu-O	Mo-O	K-O
R ₀	1.971	1.907	2.132
B	0.37	0.37	0.37