

## **B Water Activity of Unsaturated Salt Solutions at 25°C**

Anthony J. Fontana, Jr.

Molal Conc. Units	Water Activity at 25°C						
	Lithium Bromide	Potassium Hydroxide	Sodium Hydroxide	Lithium Chloride	Calcium Bromide	Lithium Iodide	Potassium Acetate
0.1	0.997	0.997	0.997	0.997	0.995	0.997	Potassium Fluoride
0.5	0.983	0.983	0.983	0.983	0.974	0.982	0.997
1.0	0.963	0.965	0.966	0.964	0.941	0.962	0.984
1.5	0.942	0.944	0.948	0.943	0.898	0.939	0.967
2.0	0.917	0.922	0.930	0.921	0.846	0.914	0.950
2.5	0.891	0.899	0.910	0.897	0.785	0.886	0.932
3.0	0.863	0.874	0.889	0.870	0.718	0.853	0.913
3.5	0.831	0.847	0.866	0.842	0.648		0.893
4.0	0.797	0.819	0.842	0.812	0.572		0.876
4.5	0.761	0.789	0.816	0.780	0.493		0.852
5.0	0.724	0.760	0.789	0.747	0.417		
5.5	0.688	0.729	0.762	0.713	0.347		
6.0	0.651	0.699	0.734	0.679	0.284		
7.0	0.574	0.634	0.674	0.609			
8.0	0.496	0.569	0.612	0.539			
9.0	0.423	0.508	0.549	0.473			
10.0	0.352	0.450	0.488	0.412			
11.0	0.287	0.393	0.430	0.356			
12.0	0.235	0.340	0.376	0.307			
13.0	0.187	0.296	0.328	0.266			
14.0	0.149	0.262	0.285	0.230			
15.0	0.121	0.225	0.249	0.200			
16.0	0.098	0.191	0.218	0.175			
17.0	0.081		0.192	0.155			
18.0	0.067		0.170	0.138			
19.0	0.056		0.152	0.123			
20.0	0.048		0.136	0.110			

Molal Conc.	Water Activity						
	Magnesium Chloride	Sodium Iodide	Magnesium Nitrate	Sodium Bromide	Cobalt Chloride	Potassium Iodide	Strontium Chloride
0.1	0.995	0.997	0.995	0.997	0.995	0.997	0.995
0.5	0.975	0.983	0.975	0.983	0.975	0.984	0.976
1.0	0.942	0.965	0.944	0.966	0.944	0.967	0.947
1.5	0.900	0.946	0.906	0.948	0.904	0.951	0.911
2.0	0.848	0.925	0.862	0.929	0.859	0.933	0.870
2.5	0.788	0.903	0.813	0.908	0.810	0.916	0.822
3.0	0.722	0.880	0.758	0.887	0.758	0.899	0.768
3.5	0.652	0.855	0.701	0.865	0.709	0.881	0.711
4.0	0.580		0.643	0.841	0.664	0.863	0.654
4.5	0.509		0.585			0.846	
5.0	0.439		0.526				
5.5							
6.0							

	Ammonium				Potassium	
	Sodium Chloride	Ammonium Chloride	Potassium Bromide	Ammonium Sulfate	Strontium Nitrate	Potassium Sulfate
0.1	0.997	0.997	0.997	0.996	0.996	0.996
0.5	0.984	0.984	0.984	0.982	0.979	0.985
1.0	0.967	0.968	0.968	0.966	0.960	0.973
1.5	0.950	0.952	0.952	0.951	0.941	0.962
2.0	0.932	0.937	0.936	0.935	0.921	0.953
2.5	0.913	0.921	0.920	0.919	0.902	0.920
3.0	0.893	0.905	0.903	0.902	0.881	0.881
3.5	0.873	0.889	0.887	0.885	0.860	0.860
4.0	0.852	0.873	0.870	0.867	0.838	
4.5	0.830	0.857	0.853	0.849		
5.0	0.807	0.842	0.835	0.831		
5.5	0.784	0.826	0.818	0.813		
6.0	0.760	0.811	0.801			