

VAPOR PRESSURE OF SATURATED SALT SOLUTIONS

This table gives the vapor pressure of water above saturated solutions of some common salts at ambient temperatures. Data on pure water are given on the last line for comparison.

The references provide additional information on water activity, osmotic coefficient, and enthalpy of vaporization.

References

1. Apelblat, A., *J. Chem. Thermodynamics*, 24, 619, 1992.
2. Apelblat, A., *J. Chem. Thermodynamics*, 25, 63, 1993.
3. Apelblat, A., *J. Chem. Thermodynamics*, 25, 1513, 1993.
4. Apelblat, A. and Korin, E., *J. Chem. Thermodynamics*, 30, 59, 1998.

Salt	Vapor Pressure in kPa							Ref.
	10°C	15°C	20°C	25°C	30°C	35°C	40°C	
BaCl ₂	0.971	1.443	2.073	2.887	3.903	5.133	6.576	1
Ca(NO ₃) ₂	0.701	1.015	1.381	1.772	2.154	2.487		1
CuSO ₄	1.113	1.574	2.189	2.996	4.037	5.363		3
FeSO ₄	0.978	1.516	2.208	3.035	3.950	4.884		3
KBr	0.953	1.338	1.853	2.533	3.419	4.563		3
KIO ₃	1.100	1.564	2.177	2.970	3.979	5.236	6.778	4
K ₂ CO ₃	0.541	0.802	1.134	1.536	1.997	2.499	3.016	1
LiCl	0.128	0.193	0.279	0.384				2
Mg(NO ₃) ₂	0.726	0.999	1.339	1.749	2.231	2.782	3.397	1
MnCl ₂	0.697	1.064	1.515	2.020	2.535	3.002		3
NH ₄ Cl	0.971	1.328	1.836	2.481				2
NH ₄ NO ₃	0.853	1.152	1.524	1.972				2
(NH ₄) ₂ SO ₄	0.901	1.319	1.871	2.573	3.439	4.474		3
NaBr	0.722	1.004	1.376	1.858	2.475	3.255	4.229	4
NaCl	0.921	1.285	1.768	2.401	3.218	4.262	5.581	4
NaNO ₂	0.703	0.994	1.381	1.888	2.540	3.368	4.403	4
NaNO ₃	0.884	1.244	1.719	2.335	3.121	4.109	5.333	4
RbCl	0.862	1.215	1.684	2.298	3.088	4.089	5.343	4
ZnSO ₄	0.945	1.401	1.986	2.698	3.523	4.431	5.382	1
Water	1.228	1.706	2.339	3.169	4.246	5.627	7.381	