

Table 1. Chemical characteristics of compounds common to soil nutrient management.

Grp No.	Substance	M.W	pH		0.01 Mole Solubility		pH buffering (L, M, H)	Cation	Anion
			initial*	final**	10 ml	100 ml			
1	H₂O <i>water</i>	18	6.94	11.25					
1	KCl <i>potassium chloride</i>	74.6	7.7	2.05	S	S			
1	CaCl₂ <i>calcium chloride</i>	111	7.3	2.05	S	S			
1	FeCl₃ <i>iron chloride</i>	162	1.5	1.68	S	S			
1	Soil		4.55	11.04					
2	K₂SO₄ <i>potassium sulfate</i>	174	7.0	11.79	I	S			
2	CaSO₄ <i>gypsum</i>	136	6.2	11.48	I	I			
2	NaHCO₃ <i>sodium bicarbonate</i>	84	8.4	8.96	I	S			
2	soil		4.1	9.68					
3	KH₂PO₄ <i>potassium phosphate</i>	136	5.74	6.05	S	S			
3	Cl₂Cu*2H₂O <i>Copper Chloride</i>	170	4.55	3.85	S	S			
3	MgCO₃ <i>magnesium carbonate</i>	84	9.63	8.60	I	I			
3	soil		8.74	5.6					
4	(NH₄)₂HPO₄ <i>diammonium phosphate</i>	132	4.44	5.65	S	S			
4	NH₄H₂PO₄ <i>ammonium dihydrogen phosphate</i>	115	8.01	7.69	I	S			
4	CaHPO₄ <i>dicalcium phosphate</i>	136	7.72	4.41	I	I			
4	soil		7.43	1.69					
5	NH₄NO₃ <i>ammonium nitrate</i>	80	6.71	8.4	S	S			
5	NH₄HCO₃ <i>ammonium carbonate</i>	79	6.03	7.7	S	S			
5	CaCO₃ <i>calcium carbonate</i>	100	7.57	6.03	I	I			
5	soil		7.98	6.29					

*pH after all water has been added.

**pH measured 5 minutes after addition of acid or base.