

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	7.24	2.45					
1	KCl <i>potassium chloride</i>	74.6	7.16	2.18	S	S			
1	CaCl₂ <i>calcium chloride</i>	111	6.63	11.09	S	S			
1	FeCl₃ <i>iron chloride</i>	162	1.58	1.74	S	S			
1	Soil		7.28	1.70					
2	K₂SO₄ <i>potassium sulfate</i>	174	7.95	2.76	I	I			
2	CaSO₄ <i>gypsum</i>	136	7.52	2.42	S	S			
2	NaHCO₃ <i>sodium bicarbonate</i>	84	8.44	7.51	S	S			
2	soil		4.85	8.20					
3	KH₂PO₄ <i>potassium phosphate</i>	136	5.4	5.80	S	S			
3	Cl₂Cu*2H₂O <i>Copper Chloride</i>	170	4.1	3.85	S	S			
3	MgCO₃ <i>magnesium carbonate</i>	84	8.0	8.50	S	S			
3	soil		8.3	5.95					
4	(NH₄)₂HPO₄ <i>diammonium phosphate</i>	132	8.02	7.67	S	S			
4	NH₄H₂PO₄ <i>ammonium dihydrogen phosphate</i>	115	5.25	6.00	S	S			
4	CaHPO₄ <i>dicalcium phosphate</i>	136	7.66	5.34	I	S			
4	soil		7.45	6.65					
5	NH₄NO₃ <i>ammonium nitrate</i>	80	6.8	8.2	S	S			
5	NH₄HCO₃ <i>ammonium carbonate</i>	79	8.4	7.7	S	S			
5	CaCO₃ <i>calcium carbonate</i>	100	7.4	5.9	I	I			
5	soil		4.9	10.7					

*pH after all water has been added.

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