

Table 1. ESI-MS compatible (volatile) buffer components recommended for Waters XBridge Columns at high pH by Waters.

Additive/Buffer	pKa	Buffer range	Recommended concentration
4-Methylmorpholine	~8.4	7.4-9.4	10 mM or less
Ammonia (NH ₄ OH)	9.2	8.2-10.2	Below 10 mM
Ammonium Bicarbonate	10.3 (HCO ₃ ⁻)	6.8-11.3	5-10 mM range
	9.2 (NH ₄ ⁺)		
Ammonium (Acetate)	9.2	8.2-10.2	1-10 mM range
Ammonium (Formate)	9.2	8.2-10.2	1-10 mM range
1-Methylpiperidine	10.2	9.3-11.3	1-10 mM range
Triethylamine (as acetate salt)	10.7	9.7-11.7	0.1-1.0 % range
Pyrrolidine	11.3	10.3-12.3	-