

pKa Values of Common Capillary Electrophoresis Buffers

The dissociation constant (pK) is the pH at which 50% of a compound is protonated. Some compounds will have more than one pK. This can be the same or differ from the compound's pI or isoelectric point.

Buffer	pK
Acetate	4.75
Boric (pK1)	9.14
Boric (pK2)	12.74
Boric (pK3)	13.80
CAPS	10.40
Citrate (pK2)	4.76
Citric (pK2)	5.95
Citric (pK3)	6.39
Citric (pKa1)	3.14
Glycine (pK2)	9.6
Glycine (pK1)	2.3
Maleic (pK1)	1.9
Maleic (pK2)	6.2
Malic (pK1)	3.40
Malic (pK2)	5.11
MES	6.15
Phosphate (pK1)	2.15
Phosphate (pK2)	7.21
Phosphate (pK3)	12.67
Sodium Benzoate	4.2
Sulfurous (pK1)	1.81
Sulfurous (pK2)	6.91
Tetra Borate (pK1)	4.00
Tetra Borate (pK2)	9.00
Tris	8.3