

各种缓冲液的性质对照表

缓冲液	化学名称	分子量	pKa 值	缓冲范围
MES	2-(N-morpholino)ethanesulfonic acid	195.2	6.1	5.5-6.7
Bis-Tris	bis(2-hydroxyethyl)iminotris(hydroxymethyl)methane	209.2	6.5	5.8-7.2
ADA	N-(2-acetamido)-2-iminodiacetic acid	190.2	6.6	6.0-7.2
ACES	2-[(2-amino-2-oxoethyl)amino]ethanesulfonic acid	182.2	6.8	6.1-7.5
PIPES	piperazine-N,N'-bis(2-ethanesulfonic acid)	302.4	6.8	6.1-7.5
MOPSO	3-(N-morpholino)-2-hydroxypropanesulfonic acid	225.3	6.9	6.2-7.6
Bis-Tris Propane	1,3-bis[tris(hydroxymethyl)methylamino]propane	282.3	6.8	6.3-9.5
BES	N,N-bis(2-hydroxyethyl)-2-aminoethanesulfonic acid	213.2	7.1	6.4-7.8
MOPS	3-(N-morpholino)propanesulfonic acid	209.3	7.2	6.5-7.9
HEPES	N-(2-hydroxyethyl)piperazine-N'-(2-ethanesulfonic acid)	238.3	7.5	6.8-8.2
TES	N-tris(hydroxymethyl)methyl-2-aminoethanesulfonic acid	229.2	7.4	6.8-8.2
DIPSO	3-[N,N-bis(2-hydroxyethyl)amino]-2-hydroxypropanesulfonic acid	243.3	7.6	7.0-8.2
TAPSO	3-[N-tris(hydroxymethyl)methylamino]-2-hydroxypropanesulfonic acid	259.3	7.6	7.0-8.2
Tris	tris(hydroxymethyl)aminomethane	121.1	8.1	7.0-9.1
HEPPSO	N-(2-hydroxyethyl)piperazine-N'-(2-hydroxypropanesulfonic acid)	268.3	7.8	7.1-8.5
POPSO	piperazine-N,N'-bis(2-hydroxypropanesulfonic acid)	362.4	7.8	7.2-8.5
EPPS	N-(2-hydroxyethyl)piperazine-N'-(3-propanesulfonic acid)	252.3	8.0	7.3-8.7
TEA	triethanolamine	149.2	7.8	7.3-8.3
Tricine	N-tris(hydroxymethyl)methylglycine	179.2	8.1	7.4-8.8
Bicine	N,N-bis(2-hydroxyethyl)glycine	163.2	8.3	7.6-9.0
TAPS	N-tris(hydroxymethyl)methyl-3-aminopropanesulfonic acid	243.3	8.4	7.7-9.1
AMPSO	3-[(1,1-dimethyl-2-hydroxyethyl)amino]-2-hydroxypropanesulfonic acid	227.3	9.0	8.3-9.7
CHES	2-(N-cyclohexylamino)ethanesulfonic acid	207.3	9.3	8.6-10.0
CAPSO	3-(cyclohexylamino)-2-hydroxy-1-propanesulfonic acid	237.3	9.6	8.9-10.3
AMP	2-amino-2-methyl-1-propanol	89.1	9.7	9.0-10.5
CAPS	3-(cyclohexylamino)-1-propanesulfonic acid	221.3	10.4	9.7-11.1