

# Modifying Enzyme Buffers

Modifying Enzyme	Universal Buffer Concentration				Heat Inactivation
	0.5X	1.0X	1.5X	2.0X	
Alkaline Phosphatase	80%	80%	80%	80%	+
DNA Polymerase 1	100%	80%	50%	20%	
DNase 1, RNase free	100%	80%	50%	20%	
Klenow DNA Polymerase	100%	80%	50%	20%	
<i>pfu</i> DNA Polymerase	20%	0%	0%	0%	+
Reverse Transcriptase (MMLV)	0%	0%	0%	0%	
Reverse Transcriptase (AMV)	80%	80%	80%	80%	
SP6 RNA Polymerase	0%	0%	0%	0%	

+ Will heat inactivate in 20 minutes at 65°C

Modifying Enzyme	Universal Buffer Concentration				Heat Inactivation
	0.5X	1.0X	1.5X	2.0X	
T3 RNA Polymerase	0%	0%	0%	0%	+
T4 DNA Ligase	80%	80%	50%	20%	
T4 DNA Polymerase	50%	20%	0%	0%	
T7 Polynucleotide Kinase	100%	100%	100%	100%	
T7 RNA Polymerase	0%	0%	0%	0%	+
<i>Taq</i> DNA Polymerase	20%	20%	20%	20%	
Terminal Transferase	50%	50%	20%	20%	

+ Will heat inactivate in 20 minutes at 65°C