

# Formulas for QIAGEN® Kit Buffers

For long term storage, all buffers should be sterilized by filtration or autoclaving. Solutions that contain ethanol, isopropanol or MOPS should be sterilized by filtration only.

**P1 (resuspension buffer):** (QIAGEN® cat# 19051, 500ml) 50 mM Tris-HCl, 10 mM EDTA, pH 8.0 (25°C), 50-100 µg/ml RNase A (QIAGEN cat# 19101)

**P2 (lysis buffer):** (QIAGEN cat# 19052, 500ml) 200 mM NaOH, 1% SDS

**N3 (neutralization buffer for DNA binding):** (QIAGEN cat# 19064, 500ml) 4.2 M guanidine hydrochloride (GuHCl), 0.9 M potassium acetate, pH 4.8

**P3 (neutralization buffer for midi, maxi, giga tips):** DO NOT USE for spin columns, use N3; 3.0 M potassium acetate, pH 5.5

**DP3 (neutralization buffer for QIAGEN DirectPrep® 96-well miniprep):** 3.0 M ammonium acetate, pH 5.5

**PB (extra wash step for EndA+ strains or PCR kit):** (QIAGEN cat# 19066, 500ml) 5 M guanidine hydrochloride (Gu-HCL) 30% isopropanol

**5x PE (add ethanol to 80% before use):** (QIAGEN cat# 19065, 100ml for making 500ml 1x PE Buffer) 80 mM NaCl, 8 mM Tris-HCl, pH 7.5 (25°C)

**EB (DNA elution buffer):** 10 mM Tris-HCl, pH 8.0 or ddH<sub>2</sub>O

**QG:** (QIAGEN cat# 19063, 250ml) 5.5 M guanidine thiocyanate (GuSCN), 20 mM Tris-HCl, pH 6.6 (25°C), dissolve in pH 7 standard solution or water

**AE (elution buffer for genomic DNA preps):** 10 mM Tris-HCl, pH 8.0 0.5 mM EDTA, pH 9.0

**QX1 (solubilization and binding of agarose gels):** (QIAGEN cat# 20912, 500ml) 7M NaPO<sub>4</sub> 10mM NaAc, pH 5.3

**QXB (for binding of large >3.0kb fragments to columns):** 5M GuHCl

**PAA (PAGE gel elution for DNA):** 500 mM NH<sub>4</sub>Ac 100 mM MgAc<sub>2</sub> 1 mM EDTA 0.1% SDS

**QBT (Equilibration buffer):** (QIAGEN cat# 19054, 1L) 750 mM NaCl 50mM MOPS, pH 7.0 15% Isopropanol 0.15% Triton X-100

**QC (Wash buffer):** (QIAGEN cat# 19055, 1L) 1.0M NaCl 50mM MOPS, pH 7.0 15% isopropanol

**QF (Elution buffer):** (QIAGEN cat# 19056, 1L) 1.25M NaCl 50mM Tris-HCl, pH 8.5 15% isopropanol

**QN:** 1.6M NaCl 50 mM MOPS, pH 7.0 15% isopropanol

**FWB2 (QIAfilter® wash buffer):** 1M Potassium acetate, pH 5.0

**B1 (Bacterial lysis buffer):** 50 mM Tris-HCl pH 8.0 50 mM EDTA pH 8.0 0.5% Tween-20 0.5% Triton-X100 RNase A 200 µg/l

**B2 (Bacterial lysis buffer):** 3M GuHCl 20% Tween-20

**C1 (Cell lysis buffer):** 40°C storage 1.28 M sucrose 40 mM Tris-HCl pH 7.5 20 mM MgCl<sub>2</sub> 4% Triton X-100

**G2 (Digestion buffer):** 800 mM GU-HCl 30 mM Tris-HCl pH 8.0 30 mM EDTA pH 8.0 5% Tween-20 5% Triton-X100

**Y1 (Yeast lysis Buffer):** 40°C storage 1 M Sorbitol 100 mM EDTA pH 8.0 14 mM beta mercaptoethanol (added just before use)

**LyseBlue® (pH indicator dye, 1000x):** pH shift from colorless to blue at pH 9.3; 43 mg/ml Thymophthalein in 100% ethanol

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