

## 50x TAE buffer recipe

The recipe below can be used to prepare a 50x 1 L stock solution of TAE buffer. From this, a 1x working solution can be prepared.

Reagent	Weight/Volume	Final concentration
Tris base	242 grams	2 M
Glacial acetic acid	57.1 mL	1 M
0.5 M EDTA, pH 8.0	100 mL	0.05 M
MilliQ water	Up to 1 L	

## How to make 50x TAE buffer

1. Weigh out 242 g of tris base and add to a 1 L Duran bottle.
2. Measure out 700 mL of MilliQ water.
3. Dissolve the tris base by adding a magnetic flea into the bottle and placing on a magnetic stirrer. It may take a few minutes to fully dissolve.
4. Measure out 100 mL of 0.5 M EDTA pH 8.0 and 57.1 mL glacial acetic acid and add to the Duran bottle.
5. Top up the solution to 1 L with MilliQ water.

50x TAE buffer is used for storage purposes only. Do not use 50x TAE buffer directly, instead dilute to 1x TAE buffer before use.

## How to make 1x TAE buffer

The 1x TAE working buffer contains 40 mM Tris-acetate, 1 mM EDTA.

1. Add 20 mL 50x TAE stock solution previously created to a 1 L Duran bottle.
2. Add 980 mL MilliQ water.
3. Mix the solution by shaking.