

1 M Tris-HCl Recipe

The recipe below is used to prepare a 100 mL 1 M Tris-HCl solution at pH 8.0. It can, however, be tweaked to make the same solution at the desired pH.

Reagent	Weight / Volume	Final concentration
Tris base	12.11 grams	1 M
Distilled H ₂ O	Up to 100 mL	

How to make 1 M Tris-HCl pH 8.0

1. Weigh out 12.11 g Tris and add to a 100 mL Duran bottle.
2. Measure out 80 mL of distilled water and add to the Duran bottle.
3. Add a magnetic flea and place on a magnetic stirring plate to mix the solution.
4. Add a pH meter into the solution to observe the pH.
5. Slowly add concentrated hydrochloric acid (HCl) solution using a Pasteur pipette to reduce the pH to 8.0, or another desired pH. Be careful not to add too much at a time, since the pH will change rapidly.
6. Once the desired pH has been reached, top up the solution to 100 mL using distilled water.
7. To sterilise, autoclave the solution on a liquid cycle (20 min at 15 psi).