

PREPARATION OF ACID DILUTIONS

TRACEPUR HCl:

1.2 N

In a 1 L HDPE bottle, pour 900 ml nanopure water, measured using a 250 ml or greater graduated cylinder. Add to this 100 ml of concentrated Tracepur HCl. Cap and shake.

3.0 N

In a 1 L HDPE bottle, pour 750 ml nanopure water. Add to this 250 ml concentrated Tracepur HCl. Cap and shake.

8 N

In a 1 L HDPE bottle, pour 330 ml nanopure water. Add to this 670 ml concentrated Tracepur HCl. Cap and shake.

REGULAR HCl:

6 N

In a 1 L HDPE bottle, pour 500ml nanopure and 500 ml non-Tracepur concentrated HCl. This dilution is used only for cleaning the cation columns. Therefore, it does not need to be made up quantitatively. It can be made by filling with water to the half-way line marked on the 1L bottle, then adding HCl to the top. Cap and shake.

NITRIC ACID:

1%

1% nitric is used for washing lab ware. To make 1% nitric in a 500 ml wash bottle, fill bottle most of the way with nanopure, then measure in approximately 7.5 ml concentrated HNO₃. To make 1% in a liter bottle, fill bottle most of the way with nanopure, then pour in 15 ml concentrated HNO₃.

5%

5% nitric is used for the smaller heated acid bath. To make 5% nitric in the 7 L nalgene container, add approximately 6 L nanopure. Pour in .5 L concentrated HNO₃. Fill container with nanopure up to the 7 L mark.