

ICP Standards

There are several different types of standards which should be prepared and used for system parameters on a daily basis. It is also helpful to run blanks along with blank checks, and checks that correspond to one or two of the standards (which come from different 50 mL sample tubes on the standard dock). The calibrations and standards

-ICALization (using of the iCAL solution) Calibrates the instrument.

-The 71 element standard (IV-ICPMS-71A) Is to be diluted and run at 100 and 500 ppb. This will standardize the instrument for all metals.

-A separate set of standards should be produced that encompass the alkali halides, (It should contain Ca, Cl, I, K, Mg, Na, S, and Br...(need the counter ions for charge balance, which is why the cations are listed)).

*Recall that oxidation state is not important because once the sample is in the plasma the free electrons will a statistical abundance of atoms and ions independent of the starting sample oxidation state.