



Solvent Bench



Acid/Alkaline Bench

Standard Processes

- RCA SC1/SC2 at 75-80 °C
 - **Surface clean**
- Piranha Solution ($\text{H}_2\text{SO}_4 + \text{H}_2\text{O}_2$)
 - **Photoresist and organic materials removal**
- BOE Oxide Etch 10:1
 - **Etching dielectric layers: SiO_x , SiN_x , etc.**
- TMAH Silicon Etch (25 aq. wt%)
 - **Etching crystalline silicon**



Piranha Cleaning

Acids

- Hydrochloric Acid HCL
- Buffered Oxide Etch BOE 10:1
- Hydrofluoric Acid HF 49%
- Sulfuric Acid 96% H_2SO_4
- Nitric Acid HNO_3
- Metal Etchants (Au, Al, Cr, Ni)

Alkaline Solutions

- Ammonium Fluoride 40% NH_4F
- Hydrogen Peroxide 30% H_2O_2
- Ammonium Hydroxide 29% NH_4OH

Solvents

- Acetone
- Isopropyl Alcohol
- Methanol