

KOH/TMAH Chemical Bench

Operating Procedures LINK



Process Description:

Two commonly used chemicals for silicon wet etching are potassium hydroxide (KOH) and tetra-methyl ammonia hydroxide (TMAH). These etch chemistries are highly directional and selectively etch along the silicon crystallographic orientation. This etch is often used in MEMS applications to create three-dimensional structures.

Equipment Description:

There are two separate process tanks on the bench. Each tank has a Teflon immersion heater and Teflon fiber optic liquid level sensor. The system controller has temperature settings for both high and low levels. The level sensor monitors the solution level in the tank and will alarm when a low liquid level is detected. Each tank temperature is set at 80°C.

The bench is also equipped with a three-station cascade D.I water rinser. A start button on the front panel activates one five-minute rinse cycle.

<i>Materials Allowed</i>	<i>Materials Not Allowed</i>
Silicon	Photoresists
Silicon dioxide	Metals
Silicon nitride	