

## Presentation uses policy for Perchloric acid (HClO<sub>4</sub>) (By Dr. Bikash Dev Choudhury)

Perchloric acid (HClO<sub>4</sub>), an oxygen acid of chlorine, is strongly acidic in nature. Hydrates of perchloric acid are obtained on its dissolution in water.

It would be used for **Triacid mixture** along with Sulphuric acid and Nitric acid in 1:1:1 ratio for cleaning of Diamond substrate for any metal / organic/inorganic contamination and also to etch back graphitization on top layer of Diamond due to high temperature treatment (few nm).

It would be used by Prof. Kasturi Saha's group and wet chemistry lab responsible with all necessary precaution taken and by trained personal only and will be kept in Chemical Storage Room(acid storage).

It must be used/process will be in wet chemistry lab in general purpose wet bench.

Propper disposal as per existing rules for acid disposal must be adhere.

Handling : Should take all necessary precautions required for strong acid handling, including proper apron, gloves, eye shields, always use it inside the wet bench.

Reference: <https://www.sigmaaldrich.com/catalog/product/sigald/244252?lang=en&region=IN>