

Hydrogen Peroxide method for removing organics from fine grained samples.

1. Use 30% concentration hydrogen peroxide.
2. Put ~1 tablespoon of sediment in a test tube or beaker and add about 10-15 mL of hydrogen peroxide.
3. If using a test tube, briefly cap the tube to shake the mixture and then remove the cap.
4. If samples are rich in organics, then use glass beakers and add a bit more hydrogen peroxide, making sure to stir the mixture.
5. To speed this process along, you can place the test tube/beakers in a hot water bath. The key is that the product of the reaction will cause a gas release so if you're not careful, the sample will bubble over the beaker/test tube. To get a clean sample, it may be necessary to add more hydrogen peroxide and repeat this entire process.
6. The reaction of hydrogen peroxide and the organic material will essentially leave behind the sediment, water, and CO₂ dissolves out during the process.
7. After the sediments have gone through the treatment process with hydrogen peroxide, it's important to rinse out the sample (3x with DI water).
8. Dry samples in a drying oven at 80°C or less until all water is evaporated.
9. If using a test tube, you can concentrate the sediments using a centrifuge before using a drying oven.