

Boil mercury from amalgam to separate from gold. Process allows you to reclaim and reuse the mercury. Reservoir handles approximately 2 lb of amalgam. Using a retort is an environmentally safe way to clean mercury.

Instructions:

Preparing the Retort (Please refer to diagram in gallery picture)

1. Clean the retort heating chamber cavity bowl with alcohol to remove any oils, and allow it to air dry.
2. Check to make sure no obstructions are in the condensing tube with a pipe cleaner.
3. Use powdered graphite to coat the threads, upper and lower cavity surfaces. Coating the threads prevents vapour leakage and makes the bowl easier to unscrew. Coating the inside surfaces of the cavity prevents gold from sticking to the surface.
4. Set the retort on an elevated, level surface.
5. Place your gold and mercury amalgam into the lower cavity, and screw into the upper part of the cavity securely.
6. Fill the water cup with 50/50 mix of water and antifreeze.
7. Wrap a piece of cotton cloth (making a tube) around the discharge end of the retort. Attach the cloth tube to the discharge tube with a rubber band or twist tie.

Place a water filled glass container (Pyrex Beaker) under the discharge tube so that the cloth tube is in the water. The water should wick up the cloth tube and prevent any accidental loss of vapour. **Do not allow the metal of the retort to touch the glass container, or the water.**

Retorting (**Be sure to do the following outdoors.**)

1. Make a tin can chimney around the heating cavity as shown in photo.
2. Use a propane torch or other high temperature source to heat the cavity bowl. It will probably take propane about twenty minutes to heat the bowl to 380° C or cherry red. You don't want to heat too fast. This will cause boiling/sputtering of mercury/gold into condenser tube.
3. Mercury should start dripping into the glass from the discharge end of the retort shortly after heat is applied.
4. After the mercury has stopped dripping for 5 minutes, remove the heat and let the retort cool completely.
5. Empty the mercury from the water glass into your mercury storage container.
6. Unscrew the cavity bowl to remove the gold sponge.

Store all devices used to process mercury in air tight plastic bags in a secure location.

DO NOT allow children to play with these devices.

