

How to Clean Glassware (Carbon and Nitrogen Free)

How to clean glassware for use on Shimadzu TOCV/TN.

1. Clean glassware as soon as possible after use.
 1. Empty current contents.
 2. Make sure to remove all traces of parafilm.
 3. Remove sharpie™ markings with isopropyl alcohol.
2. Rinse 1x with D.I. water from tap. If glassware has not dried out and/or has no visible residue you may skip to step .
3. If any visible residue remains in the glassware
 1. Soak glassware for 2 hours in Liqui-Nox bath (small amount of Liqui-Nox in tub of warm water).
 2. Rinse 3x with D.I. water from tap, both insides and outsides of vials.
 3. Allow glassware to drain (mostly dry).
4. Transfer glassware to acid bath (~10% HCl) for a minimum of 1 hour. Wear dishwashing (orange nitrile) gloves when working with acid bath. NO single use gloves. Make sure that interior surface of glassware is fully submerge in acid (no air bubbles).
5. Remove glassware from acid bath directly into wash tub. Drain as much acid back into bath as possible. Take care not to drip or splash acid outside of bath.
6. Rinse glassware 3x with Milli-Q water. Drain. Allow to dry.
7. Clean, dry glassware should be stored in the Shimadzu cabinet.

**Glassware MUST be ashed before using glassware for field sampling or on the Shimadzu.
It is the responsibility of the person using the glassware to do the ashing.**

1. Wearing grey (single use) gloves wrap/cap top of each vial with foil (shiny side out).
2. Place glassware in metal tray.
3. Place tray of glassware in muffle furnace.
4. Close door and set furnace temperature.
5. Turn furnace on. Allow 1 hr for oven to warm up. Check at 30 minutes and at one hour to verify that furnace is functioning properly and temperature gauge has not 'pegged'.
6. Bake at 475°C for 4 hours.
7. Allow glassware to cool in oven overnight.
8. Transfer vials to clean plastic bin for storage.