

QianCap™ (patent pending) Set-Up

QianCap™ is designed for use on standard pressure tubes and bottles with internal threads.

IMPORTANT

- Due to varying conditions, Q Labtech cannot guarantee glass vessels from breakage under pressure
- Do not use it if there are any scratches and cracks on Pressure Vessels!
- Inspect Needle Adapter (7) and Needle (8) prior to each use.
- Clogged Needle Adapter (7) and/or Needle (8) could result in personal injury!

Step 1. Place a stir bar, reactant(s), reagent(s) and solvent(s) into Pressure Bottle (1) (total volume shall be 1/3 of total volume of pressure bottle or less)

Step 2. Finger-tighten Teflon adapter onto Pressure Bottle (1)

(Warning: over-tightening adapter could break the bottle neck!)

Step 3. Place a septa (4) (blue PTFE side faces down) onto Q-Adapter (2)

Step 4. Screw the Cap (5) [with pressure Adapter-60 (6)] onto Q-Adapter (2)

Step 5. Insert the Needle Adapter (7) [with a needle (8) at one end and a Catch Bottle(11) at another end] into the Pressure Adapter (6), turn Locking pin (9) clockwise to engage in Locking slot (10)

Step 6. For safety, turn Pressure Adapter (6) until "Front Side" label faces you [Locking slot (10) faces back]

Step 7. Place Pressure Bottle (1) into a Q-Block or an oil bath at room temperature

Step 8. Place a weighted safety shield in the front of pressure bottle and turn on heating

Step 9. After a reaction completes, cool it down to solvent boiling point or lower, **press Needle Adapter (7) down to release internal pressure prior to uncapping.**

- Note:**
1. Sampling can be done by cooling the reaction to solvent boiling point or lower, then pressing Needle Adapter (7) down to release internal pressure, uncapping cap (5), removing septa, placing a pipette through the hollow on Teflon Q-Adapter (2). Replacing septa and tightening the cap (5) if heating is applied again
 2. To unscrew Teflon Q-Adapter, the bottle must be cooled to room temperature
 3. Pressure Adapter-60 is designed for using on pressure bottles rated at 60 psi. A High Pressure Adapter-120 is available for pressure tube/bottle rated at 150 psi (usually, a bottle or tube rated at 150 psi has O.D.50 mm or less and round bottom)
 4. A Simriz® O-ring was pre-installed. Use only Simriz® for O-ring replacement

Warning: Use Teflon tape if reassembling pressure gauge on QianCap Pressure Monitor system

