

MAN ON THE MOON



milireactor

www.manonthemoontech.com

The kit consists of a milireactor, and a 1 m piece of high pressure flexible tubing (1/4" O.D.) to connect the reacting gas source (usually a cylinder) and the milireactor via a quick connector. The specifications for the components of the kit permit maximum working temperatures about 150 °C (423 K). Every reactor is tested with hydrogen at 80 barg (1200 psig).

Warning! High pressure. Work safely
See safety specifications for your reacting gas



Before starting the experiments, we recommend you to connect the system and check it for leaks at the desired working pressure. This can easily be done by immersing the milireactor under water once assembled and pressurized.

The milireactor has been conceived to avoid exposition of your reaction to air. To this end, prepare your reaction in a 2 mL septum vial under inert gas, connect the milireactor to a Schlenk manifold and close it incompletely, as shown in the left picture (three turns of screw, maximum). Then, evacuate the empty space outside the vial passing through inert gas for several minutes (you may try a cycle of vacuum / inert gas to start the procedure). After, tighten the screw completely, so that the needle can reach the interior of the vial, as shown in the right picture. Now you can apply vacuum to the whole system to evacuate the inert gas (optional) and turn the 3-way valve to pressurize the reaction with the desired gaseous reagent.

The milireactor can be closed by hand, no tools are required.

Warning! To release the pressure inside the milireactor you must first open the Schlenk manifold elsewhere, to allow free escape of inert gas. Then, turn the 3-way valve to connect the inside of the reactor and the inert gas circuit. After, you can close the additional inert gas exit, unscrew the reactor and remove the vial from the needle; safely under inert gas.

