

Safety Slide

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High Pressure Reactor

–Definition

Sometimes referred to as a pressure tube, or a sealed tube. The pressure can be caused by the reaction itself or created by an external source, like hydrogen in catalytic hydrogenation.

–Types

Standard glass pressure reactor, Fisher-Porter tube, Q-tube, Metal pressure reactor, Microwave synthesizer.

–Handling

Choose the right reactor (based on the parameters of vessel, your own reaction)

Set-up the reaction (metal pressure reactors are complexed)

Check the reaction (**temperature, pressure, stirring**)

Safety Shield!!

Workup the reaction (**low down the temperature! release gas slowly!**)

Clean the vessel completely (maintenance, prevent corrosiveness)

PPE (goggles, gloves, lab coat, pants, closed-toe shoes)

