

REACTION AUTOCLAVE

BÜCHIGLASS USTER - PICOCLAVE

The reaction autoclave with a thermostat Julabo is used for a wide range of chemical syntheses from hydrogenation, hydrothermal syntheses to reactions at low temperatures. It is used especially in the cases when high temperature and pressure is needed.

ACQUIRED INFORMATION

- > Carrying out of high-pressure and/or high temperature chemical synthesis
- > Synthesis under optional atmosphere

SAMPLE TYPES

- > Liquid or powder materials
- > Inorganic, organic or coordination compounds

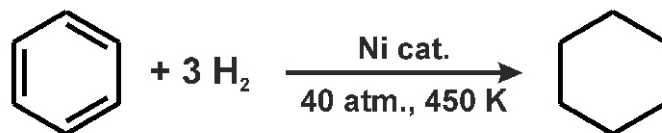
MODES, CONDITIONS AND PRECISION

- > 3 reaction vessels can be used – stainless steel (50 mL) and two glass vessels (50 and 300 mL)
- > Temperature range 0–220 °C, depending on the vessel used
- > The range of pressures from 1 up to 60 bars, depending on the vessel used
- > Stirrer rotation up to 3000 min⁻¹
- > Inert (e.g. N₂) or hydrogen atmosphere for hydrogenation reactions
- > Possibility of sampling during a reaction
- > Possibility of adding liquid or solid reactants during syntheses
- > Changing and programming the temperature gradients in a given range (suitable for e.g. controlled crystallization)



Picoclave (Büchiglass Uster)

**Benzene hydrogenation
under autoclaving conditions**



Example of reaction (hydrogenation) feasible in Picoclave under the given reaction conditions

DETAILED INFORMATION ON REQUEST



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