

REACTION AUTOCLAVE

BÜCHIGLAS 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

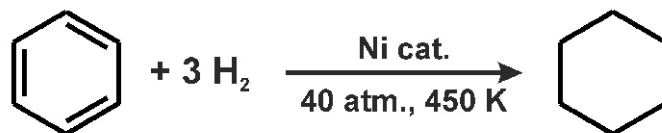
MODES, CONDITIONS AND PRECISION

- > 3 reaction vessels available – 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
- > Mechanic 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 (Büchiglas 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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