Encapsulator B-390
For innovative microbeads and microcapsules

The versatile system for controlled encapsulation of active ingredients and materials for laboratory-scale research and development work. The simplicity and adaptability of the device allow its use in a variety of areas – pharmaceuticals, materials, cosmetics, the food industry and agriculture.

Versatile
Numerous applications in a variety of scientific fields

Reliable
Efficient, reproducible encapsulation process

User-friendly
Intuitive to operate and easy to maintain
**Encapsulator B-390**
Your partner for the production of microbeads and microcapsules

**Pulsation unit**
Precise generation of mechanical vibrations
(40 – 6000 Hz)

**Nozzle heating**
Processing of melts up to 80 °C

**Control panel**
Intuitive control of process parameters

**Pressure regulating valve**
Precise control of pressure up to 1500 mbar

**Stroboscopic lamp**
Visualization of droplet formation process

**8 precision nozzles**
(80, 120, 150, 200, 300, 450, 750 and 1000 µm)

**Application examples**

- Alginate capsules with oil core and red colouring
- Alginate capsules with multiple oil cores
- PLGA beads with Ibuprofen
- Beads made of gelatine with Vitamin C
- Dried gelatine beads
- Wax beads
Key features and options

Concentric nozzle system
Concentric nozzle system for creating core-shell capsules (dia. 200 – 2000 µm)

Flow vibration nozzle
Airflow-assisted nozzle system for producing beads (dia. 80 – 1000 µm) from highly viscous polymers

Big capsules nozzle
Nozzle system for production of large core-shell capsules (dia. 2 – 4 mm) by means of drop separation process

Nozzle heating
The integrated nozzle heater expands the breadth of applications. It enables the processing of melts such as wax or gelatine

Method of operation
A laminar-flow fluid jet is subjected to a superimposed mechanical vibration, as a result of which it disintegrates into regular-sized droplets. They are then hardened by means of chemical or physical processes. Easy to achieve with the Encapsulator B-390 from BUCHI!
Encapsulator B-390: Your most important benefits

Versatile
- Production of monodisperse microbeads and microcapsules
- Choice of particle diameters between 80 µm and 4000 µm
- Suitable for the encapsulation of microorganisms, organic and inorganic substances

Reliable
- Efficient, reproducible encapsulation process
- Exceptionally tight particle size distribution
- High encapsulation efficiency and high yields

User-friendly
- Intuitive to operate and easy to maintain
- Quick and easy process optimization thanks to visualization of droplet formation
- The BUCHI application database and BUCHI application support help you get the most out of working with the Encapsulator B-390

Complete your portfolio

Mini Spray Dryer B-290
World leading laboratory Spray Dryer

Nano Spray Dryer B-90
Spray Dryer for small samples and particles

Encapsulator B-395 Pro
Gentle, sterile bead and capsule production

Rotavapor® R-300
Convenient and efficient rotary evaporation

www.buchi.com/spray-drying

Quality in your hands