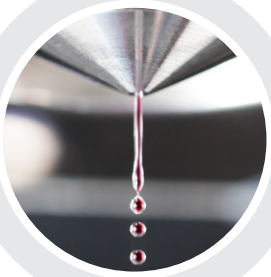
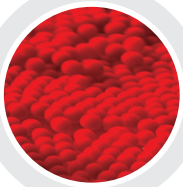
# Encapsulator B-395 Pro
## For sterile microbeads and microcapsules

A quality product for the sterile encapsulation of cells, biological and active ingredients for laboratory-scale research and development work. The highly advanced technology enables particle production for numerous biotechnology and medical processes and other fields that require sterile conditions.

### Aseptic
Sterile encapsulation of cells, microorganisms and active ingredients

### Reliable
Efficient, reproducible encapsulation process





### User-friendly
Intuitive to operate and easy to maintain

# Encapsulator B-395
Your partner for the production of microbeads and microcapsules


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

**HEPA air filter**
Protection against contamination

**Sterile filter**
Aseptic introduction of reactive fluids

**Syringe pump**
For applications with small sample sizes

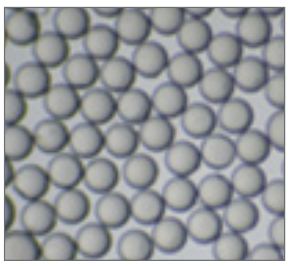
**Control panel**
Intuitive control of process parameters

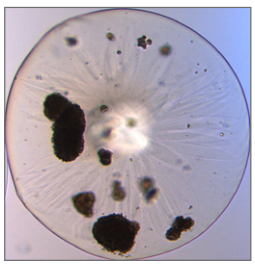
**Pressure regulating valve**
Precise control of pressure up to 1500 mbar

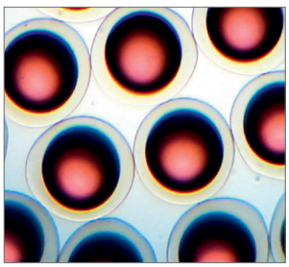
**8 precision nozzles**
80, 120, 150, 200, 300, 450, 750 and 1000 µm

**Reaction vessel***
Sterile working volume of 2 L
* Also available with material certificates

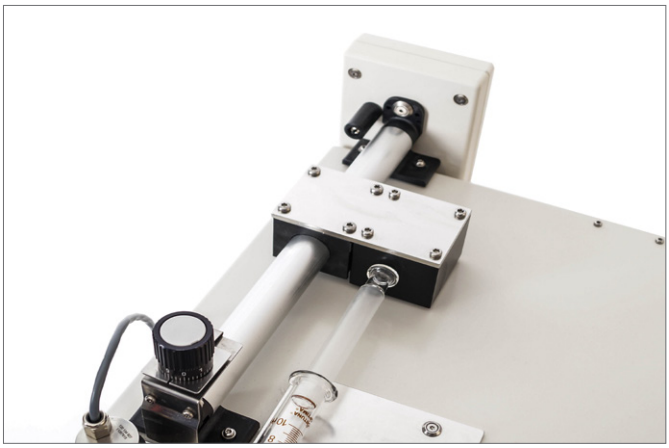
## Application examples


PLGA beads with Ibuprofen


Encapsulated islet cells


Alginate capsules with oil core and red colouring

## Key features and options



### Syringe pump

Easily calibrated syringe pump for low-loss feed of small sample quantities using sterile syringes of various volumes


### Material certificates

The reaction vessel for the Encapsulator B-395 Pro is available with material certificates for GMP documentation

### Concentric nozzle system

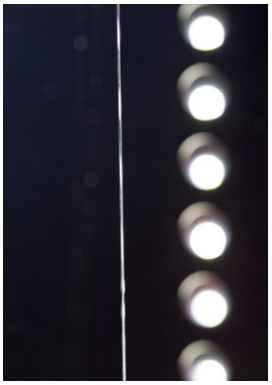
Concentric nozzle system for creating core-shell capsules (dia. 200 – 2000 µm)


### Air dripping nozzle

Nozzle system with airstream dispersal and minimized dead space, tailor-made for low-impact encapsulation of cell agglomerates

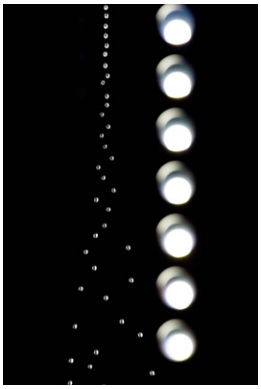
## Method of operation

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-395 from BUCHI!



Generation of a stable fluid jet

Generation of a stable, vertical droplet chain



Electrostatic dispersal of the droplet chain

## B-395 Pro: Your most important benefits

### Aseptic

· Sterile encapsulation of cells, microorganisms and active ingredients
· Aseptic introduction and removal of fluids and products to and from the reaction vessel
· Possibility of integration in a GMP-compliant production process

### Reliable

· Efficient, reproducible encapsulation process under low-impact process conditions
· Exceptionally tight particle size distribution
· High encapsulation efficiency and yield

### 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-395 Pro

*"The BUCHI Encapsulator B-395 Pro is the instrument of choice on the market for the sterile encapsulation of cells into polymeric beads and capsules, and can be integrated into a GMP process."*
Prof. Bice Conti, Université de Pavia, Lab. Pharmaceutical Technology and Law (PT&L), Dept. Drug Sciences, Italy

## 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

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