



# Application Note

## Mini Spray Dryer B-290

### Salmon calcitonin

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#### 1. General Information

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Type of application	Pharma / Medical, Natural product, Biopolymer, Protein Hormone, Biopharmaceutical
Type of application	Spray drying, Drug encapsulation
Applied device	BUCHI Mini Spray Dryer B-190
Recommended device	BUCHI Mini Spray Dryer B-290

#### 2. Sample preparation

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Sample concentration	10 mg/ml, in deionized water, Mannitol : sCT in 7 steps from 100:0 to 0:100
Solvent	Water
Carrier , Filmogen	D-Mannitol

#### 3. Spray drying parameters

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Inlet temperature	125°C
Outlet temperature	70°C
Pump rate	5 ml/min
Gas spray flow	60 psi
Drying gas flow	-
Nozzle diameter	-

#### 4. Results

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Particle size	-
Morphology	-
Yield	-
Encapsulation efficiency	-

#### 5. Additional Information

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Remarks	Examination of the stability and aggregation dependence on Mannitol concentrations
Reference	Physical Stability of Salmon Calcitonin Spray-Dried Powders for Inhalation. J. Pharm. Sci., Vol. 93, No. 3, p. 792-804 (2004)

The given process parameters are used as starting values for process optimization and give an indication if the material can be spray dried or not.