



OroCell & MCell Spheres

Mannitol (Ph. Eur / USP-NF)

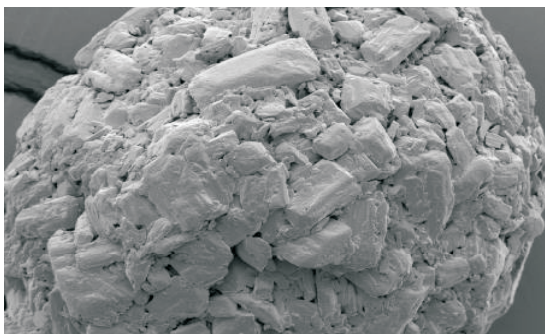
The newly developed spheronised pharmaceutical Mannitol products combine the unique and well acknowledged characteristics of compendial Mannitol with exceptional processing features as a result of innovative spheronisation technologies.

Direct Compression Grades

OroCell	90 % Mannitol	size < 500 µm
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Starter Spheres

MCell 200	100 % Mannitol	Ø ≈ 200 µm
MCell 400	100 % Mannitol	Ø ≈ 400 µm



Surface texture of OroCell 200 Spheres (SEM)

Product Applications

- Direct compression for immediate release and in particular for oral dispersible tablet (ODT) preparations
- Capsule filling and sachet filling operations
- Starter material for drug substance layering and film-coating applications

Product Characteristics

OroCell: Direct Compression Grades

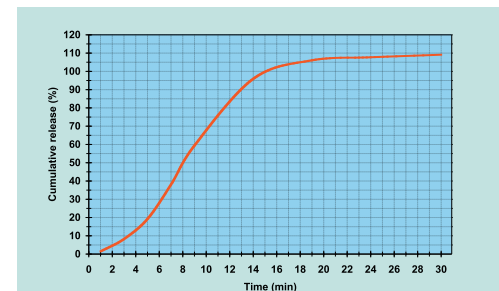
- Excellent flow, dilution and compression behaviour
- Superior strength
- Outstanding disintegration performance
- Appealing taste with cooling sensation

OroCell oral dispersible tablets – case study

Compression of 200 mg taste-masked Ibuprofen into oral dispersible tablets with OroCell as direct compressible excipient.

Owing to the unique compression behaviour, even the addition of glidants is not required. Typical features of this oral dispersible dosage form are listed below:

- Tablet mass: 660 mg
- Tablet diameter, shape: 16 mm, flat
- Tablet height: 3 mm
- Crushing strength; 27 N
- Disintegration time: 5 s

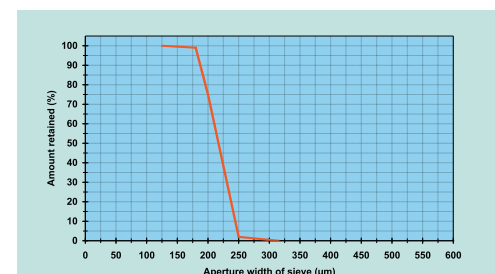


Dissolution of taste-masked Ibuprofen ODTs

MCell Spheres: Starter Spheres

- Inert, non-hygroscopic, highly spherical
- High mechanical strength, low attrition and high density
- Well defined particle size distribution

MCell starter spheres are made with a proprietary spheronisation process, which perfectly allows controlling density, surface texture and particle size distribution.



Typical particle size distribution of MCell 200 starter spheres