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pharma

# Inhalation **Lactohale® 400** Anhydrous milled lactose

Lactohale® 400 is a milled, anhydrous lactose grade with a median particle size of 100µm. The coarse milled lactose grade could be used in Dry Powder Inhalation (DPI) applications where a relatively good flow with some cohesiveness is required. Its anhydrous nature makes this a unique product in our portfolio. Lactohale® 400 is produced in Borculo, the Netherlands.

Ask an



**EXPERT**

[dfepharma.com/inhalation](https://dfepharma.com/inhalation)

# Lactohale<sup>®</sup> 400

Anhydrous milled lactose

## Benefits

Lactohale<sup>®</sup> 400 is milled, anhydrous lactose that consists of irregular shaped particles with a controlled particle size.

### Different surface properties

The anhydrous nature of Lactohale<sup>®</sup> 400 differentiates this product from most commonly used lactose carriers in DPI formulations. Anhydrous lactose has a higher true density than lactose monohydrate. Additionally, particles typically have a greater roughness, due to the microcrystalline structure of beta lactose crystals. Anhydrous lactose can provide a different aerosolization performance than lactose monohydrate with the same particle size. This is due to the difference in interfacial properties, which mainly govern the fluidization and entrainment behaviour of the lactose.

## Facts

### Typical product data

Complies with Ph.Eur., Lactose monograph  
USP-NF, JP and ChP Anhydrous Lactose monograph

	Tapped density (g/L)	Poured density (g/L)	Carr's Index (%)	LOD (%w/w)	Beta Content (%)
Lactohale <sup>®</sup> 400	920	650	29	<0.5	80

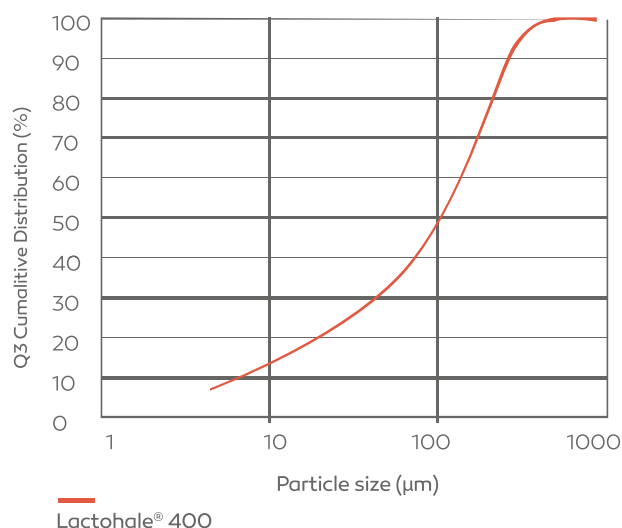
### Particle Size Distribution (Sympatec)

Lactohale <sup>®</sup> 400	D10 (µm)	D50 (µm)	D90 (µm)
	6.4	103	269

## Packaging

Darbox Alu + PE liner  
Lactohale<sup>®</sup> 400

Weight of Product	20 kg
Shelf Life	12 Months



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