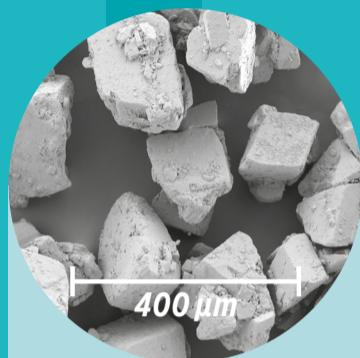


# Experts in Excipients.



## MEGGLE's alpha-lactose monohydrate qualities for dry powder inhalation

### InhaLac® sieved



**InhaLac® 70**

Particle size distribution

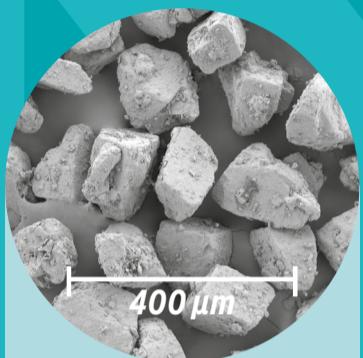
X<sub>10</sub> 110 – 160 µm

X<sub>50</sub> 180 – 250 µm

X<sub>90</sub> 270 – 340 µm

Density

bulk 0.57 – 0.70 g/ml



**InhaLac® 120**

Particle size distribution

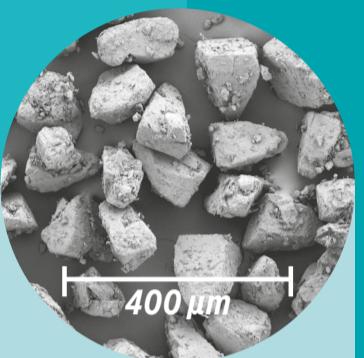
X<sub>10</sub> 70 – 105 µm

X<sub>50</sub> 110 – 155 µm

X<sub>90</sub> 160 – 215 µm

Density

bulk 0.67 – 0.77 g/ml



**InhaLac® 160**

Particle size distribution

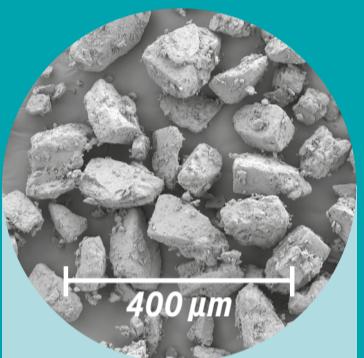
X<sub>10</sub> 55 – 85 µm

X<sub>50</sub> 90 – 120 µm

X<sub>90</sub> 125 – 165 µm

Density

bulk 0.63 – 0.76 g/ml



**InhaLac® 230**

Particle size distribution

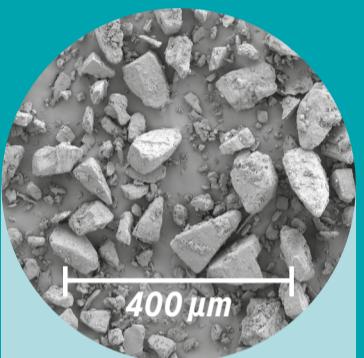
X<sub>10</sub> 30 – 60 µm

X<sub>50</sub> 70 – 110 µm

X<sub>90</sub> 110 – 150 µm

Density

bulk 0.66 – 0.76 g/ml



**InhaLac® 251**

Particle size distribution

X<sub>10</sub> 7 – 22 µm

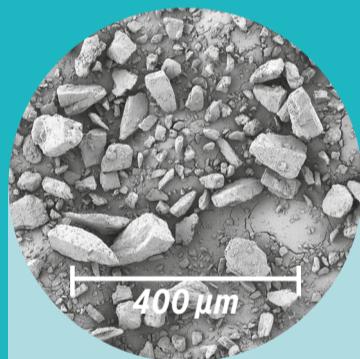
X<sub>50</sub> 40 – 70 µm

X<sub>90</sub> 80 – 120 µm

Density

bulk 0.55 – 0.70 g/ml

### InhaLac® milled



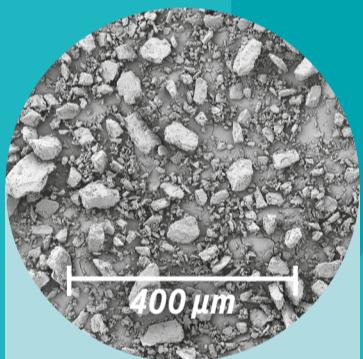
**InhaLac® 140**

Particle size distribution

X<sub>10</sub> 3 – 7 µm

X<sub>50</sub> 37 – 61 µm

X<sub>90</sub> 120 – 190 µm



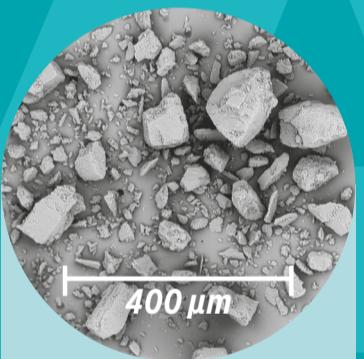
**InhaLac® 150**

Particle size distribution

X<sub>10</sub> 1 – 5 µm

X<sub>50</sub> 18 – 30 µm

X<sub>90</sub> 65 – 95 µm



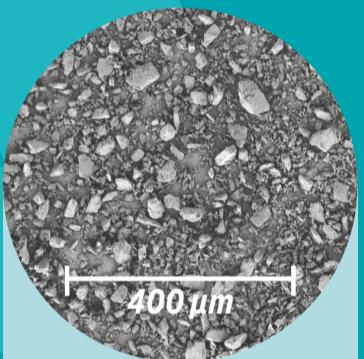
**InhaLac® 180**

Particle size distribution

X<sub>10</sub> 5 – 15 µm

X<sub>50</sub> 50 – 100 µm

X<sub>90</sub> 120 – 160 µm



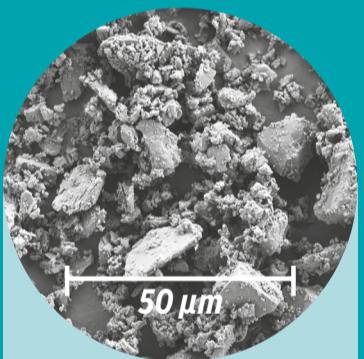
**InhaLac® 300**

Particle size distribution

X<sub>10</sub> 2.0 – 3.5 µm

X<sub>50</sub> 14 – 19 µm

X<sub>90</sub> 40 – 56 µm



**InhaLac® 400**

Particle size distribution

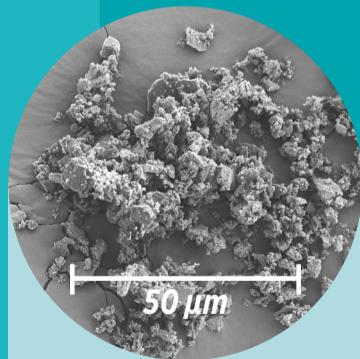
X<sub>10</sub> 0.8 – 1.6 µm

X<sub>50</sub> 4.0 – 11.0 µm

X<sub>90</sub> 15.0 – 35.0 µm

Density

bulk 0.25 – 0.40 g/ml



**micronized**

**InhaLac® 500**

Particle size distribution

X<sub>50</sub> ≤ 5 µm

X<sub>90</sub> ≤ 10 µm

MEGGLE GmbH & Co. KG  
Business Unit Excipients  
Megglestrasse 6-12  
83512 Wasserburg  
Germany  
Phone +49 8071 730  
info.excipients@meggle.com  
www.meggle-excipients.com