Pharmaceutical raw material

Lactose

Excipients for tablets and semi-solids

$C_{12}H_{22}O_{11}$ / $C_{12}H_{22}O_{11}·H_2O$



Material illustration

Substance identity

A disaccharide. The monohydrate contains one water molecule per lactose molecule. Specify the form for calculations and incoming inspection.

Property	Reference value	Method or source
Anhydrous form	**CAS 63-42-3**	PubChem
Chemical formula	**$C_{12}H_{22}O_{11}$ / 342.30 g/mol**	PubChem
Monohydrate	**CAS 5989-81-1**	PubChem · $C_{12}H_{22}O_{11}·H_2O$
Chemical formula	**$C_{12}H_{22}O_{11}·H_2O$ / 360.31 g/mol**	PubChem · $C_{12}H_{22}O_{11}·H_2O$

For acceptance, check the agreed specification and the certificate of analysis (COA) for the delivered lot.



Applications

A filler for tablets and capsules. Hydration state and powder processing both matter. Milled, spray-dried and granulated lactose differ in flow and compaction behaviour.



Purchasing criteria

State whether you need monohydrate or anhydrous lactose, the manufacturing process it will enter and the required particle-size distribution. List a declaration of dairy origin if your quality team requires one.

Technical reference

PubChem · PubChem · $C_{12}H_{22}O_{11}·H_2O$