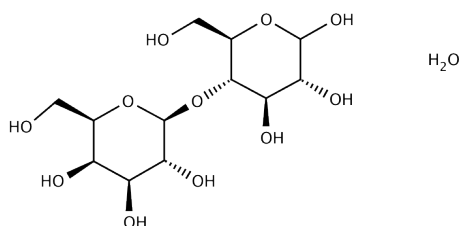


## Product Specification

Product Name : D(+)-Lactose monohydrate, 99.5%,  
 Ph. Eur. grade  
 Glentham Code : GC9081  
 CAS Number : 64044-51-5  
 EINECS : 200-559-2  
 MDL Number : MFCD00166994  
 Additional CAS : 10039-26-6  
 Additional CAS : 14641-93-1  
 Additional CAS : 5989-81-1  
 Additional CAS : 63-42-3 (anhydrous)



Molecular Weight : 360.32  
 Molecular Formula : C<sub>12</sub>H<sub>22</sub>O<sub>11</sub> · H<sub>2</sub>O  
 Storage Temp. : +20°C

Property	Specification
Physical Description	White or almost white crystalline powder
Identification	A, B, C, D according to Ph. Eur.
Solubility (10% in water)	Clear, colourless solution
Acidity or Alkalinity	≤ 0.4ml (0.1M NaOH required)
Absorbance	10% in water at 400nm: ≤ 0.04 1% in water at 270 - 300nm: ≤ 0.07 1% in water at 210 - 220nm: ≤ 0.25
Specific Optical Rotation	+54.4 - +55.9 ° (anhydrous substance)
Heavy Metals	≤ 5ppm
Water	4.5 - 5.5 %
Sulphated Ash	≤ 0.1%
Arsenic (As)	≤ 0.5ppm
Lead (Pb)	≤ 0.01ppm
Cadmium (Cd)	≤ 0.1ppm
Mercury (Hg)	≤ 0.01ppm
Cobalt (Co)	≤ 1ppm
Vanadium (V)	≤ 1ppm
Nickel (Ni)	≤ 1ppm
Lithium (Li)	≤ 1ppm
Antimony (Sb)	≤ 1ppm

## Product Specification

Barium (Ba)	≤ 1ppm
Molybdenum (Mo)	≤ 1ppm
Copper (Cu)	≤ 0.1ppm
Tin (Sn)	≤ 1ppm
Chromium (Cr)	≤ 1ppm
Purity	≥ 99.5% (anhydrous basis)
Pharmacopoeia Specification(s)	Ph. Eur.

Specification Version : v1.0  
Date Created : 2016-06-15

Glentham Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check [www.glentham.com](http://www.glentham.com) or contact us using the details above for the current version of this document.

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