

## Product Datasheet

### GC9081 - D(+)-Lactose monohydrate, 99.5%, Ph. Eur. grade

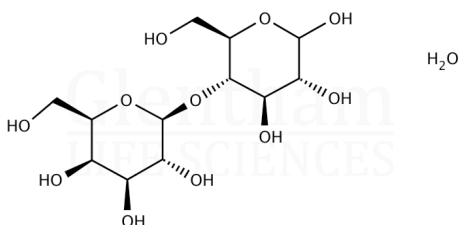
Not classified as hazardous under CLP.  
Not classified as dangerous for transport.

#### Product Details

|                    |                                                                                        |
|--------------------|----------------------------------------------------------------------------------------|
| 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)                                                                    |
| Related Categories | Carbohydrates, Core Carbohydrates, Biochemicals, Raw Materials (IVD), Oligosaccharides |

#### Structure

Molecular Weight : 360.32  
Molecular Formula :  $C_{12}H_{22}O_{11} \cdot H_2O$



#### Storage

Recommended storage temperature: +20°C.

#### Hazards and Transport

#### Glentham Product 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          | : $\leq 0.4\text{ml}$ (0.1M NaOH required)                                                                                     |
| Absorbance                     | : 10% in water at 400nm: $\leq 0.04$<br>: 1% in water at 270 - 300nm: $\leq 0.07$<br>: 1% in water at 210 - 220nm: $\leq 0.25$ |
| Specific Optical Rotation      | : +54.4 - +55.9 ° (anhydrous substance)                                                                                        |
| Heavy Metals                   | : $\leq 5\text{ppm}$                                                                                                           |
| Water                          | : 4.5 - 5.5 %                                                                                                                  |
| Sulphated Ash                  | : $\leq 0.1\%$                                                                                                                 |
| Arsenic (As)                   | : $\leq 0.5\text{ppm}$                                                                                                         |
| Lead (Pb)                      | : $\leq 0.01\text{ppm}$                                                                                                        |
| Cadmium (Cd)                   | : $\leq 0.1\text{ppm}$                                                                                                         |
| Mercury (Hg)                   | : $\leq 0.01\text{ppm}$                                                                                                        |
| Cobalt (Co)                    | : $\leq 1\text{ppm}$                                                                                                           |
| Vanadium (V)                   | : $\leq 1\text{ppm}$                                                                                                           |
| Nickel (Ni)                    | : $\leq 1\text{ppm}$                                                                                                           |
| Lithium (Li)                   | : $\leq 1\text{ppm}$                                                                                                           |
| Antimony (Sb)                  | : $\leq 1\text{ppm}$                                                                                                           |
| Barium (Ba)                    | : $\leq 1\text{ppm}$                                                                                                           |
| Molybdenum (Mo)                | : $\leq 1\text{ppm}$                                                                                                           |
| Copper (Cu)                    | : $\leq 0.1\text{ppm}$                                                                                                         |
| Tin (Sn)                       | : $\leq 1\text{ppm}$                                                                                                           |
| Chromium (Cr)                  | : $\leq 1\text{ppm}$                                                                                                           |
| Purity                         | : $\geq 99.5\%$ (anhydrous basis)                                                                                              |
| Pharmacopoeia Specification(s) | : Ph. Eur.                                                                                                                     |
| Version                        | : v1.0                                                                                                                         |

## Product Datasheet

**About D(+)-Lactose monohydrate, 99.5%,  
Ph. Eur. grade**

No further details on record.