

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

Email USA: techserv@sial.com

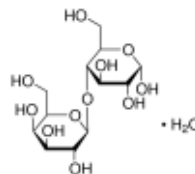
Outside USA: eurtechserv@sial.com

## Certificate of Analysis

Product Name:

 $\alpha$ -Lactose monohydrate - BioXtra,  $\geq 99\%$  total lactose basis (GC)

**Product Number:** L8783  
**Batch Number:** SLCB6278  
**Brand:** SIGMA  
**CAS Number:** 5989-81-1  
**MDL Number:** MFCD00150747  
**Formula:** C<sub>12</sub>H<sub>22</sub>O<sub>11</sub> · H<sub>2</sub>O  
**Formula Weight:** 360.31 g/mol  
**Quality Release Date:** 04 FEB 2019



Test	Specification	Result
Appearance (Color)	White to Off White	White
Appearance (Form)	Powder	Powder
Solubility (Color)	Colorless to Very Faint Yellow	Very Faint Yellow
Solubility (Turbidity)	Clear	Clear
1 M in H <sub>2</sub> O		
Ammonia (NH <sub>4</sub> )	$\leq 0.05\%$	$< 0.00\%$
by AMME		
Residue on ignition	Pass	Pass
$< \text{or} = 0.1\%$		
Chloride Content	$\leq 0.05\%$	$< 0.01\%$
by IONX		
Sulfate (SO <sub>4</sub> )	$\leq 0.05\%$	$< 0.01\%$
by IONX		
Insoluble Matter	$\leq 0.1\%$	0.0 %
Aluminum (Al)	$\leq 0.0005\%$	$< 0.0005\%$
Lead (Pb)	$\leq 0.001\%$	$< 0.001\%$
Phosphorus (P)	$\leq 0.01\%$	0.01 %
Calcium (Ca)	$\leq 0.005\%$	0.001 %
Magnesium (Mg)	$\leq 0.0005\%$	$< 0.0005\%$
Sodium (Na)	$\leq 0.005\%$	$< 0.005\%$
Iron (Fe)	$\leq 0.0005\%$	$< 0.0005\%$
Copper (Cu)	$\leq 0.0005\%$	$< 0.0005\%$
Zinc (Zn)	$\leq 0.0005\%$	$< 0.0005\%$

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

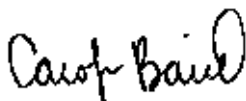
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## Certificate of Analysis

**Product Number:** L8783  
**Batch Number:** SLCB6278

Test	Specification	Result
Potassium (K) by AA	≤ 0.02 %	< 0.02 %
Purity (GC)	≥ 99 %	100 %
Total-Lactose		
Impurity	≤ 4 %	3 %
Beta-Lactose		



Carolyn Baird, Supervisor  
Quality Assurance  
St. Louis, Missouri US

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