

Certificate of Analysis

Date: 2018/11/2

Product Name: L-Threonine [Feed Grade]
CAS: 72-19-5
Batch No.: 4340372-19-5
MFG Date: 2018-10-30
EXP Date: 2020-10-29

Items	Standard	Result
Character	White crystal or crystalline powder	Conformed
Identification	Meet with the requirements	Conformed
Specific rotation	-26.7 °~ -29.1 °	Conformed
Assay	98.5 - 101.5%	99.60%
Chloride(Cl-)	0.05% max	0.03%
Sulfate(SO42-)	0.03% max	0.02%
Loss on drying	0.20% max	0.15%
Residue on ignition	0.40% max	0.16%
Volatile organic impurities	Meet with the requirements	Conformed
pH	5.0 - 6.5	6.10%
Heavy metal (Pb)	0.003% max	Conformed
Fe	0.003% max	Conformed

Conclusion: Conformed to the standard of GB/T21979-2008.

Inspector: Zhang Jiahui

Technical manager: Zhang Peng

