



CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by Intertek. Certificate

Number. 2317548

Catalogue Number 14059 Lot Number A0470859

Description L(-)-Tryptophan,99%

CAS Number 73-22-3
Quality Test/Release Date 27/Mar/2025
Suggested retest date 27/Mar/2030
Country of Origin CHINA
Declaration of Origin plant

BSE/TSE made from glucose made from sugar beets

Result Name	Units	Specifications	Test Value
Appearance (Color)		White to yellowish-white	yellowish-white
Appearance (Form)		Crystalline powder	Crystalline powder
Infrared spectrum		Conforms	Conforms
Titration with HCIO4	%	98.5 to 101.5 (On dry substance)	99.8 (On dry substance)
Loss on drying	%	=<0.5 (1 g, 105°C)	=<0.5 (1 g, 105°C)
Specific optical rotation		-29.0° to -33.0° (20°C, 589 nm) (C=1, H2O)	-31.3° (20°C, 589 nm) (C=1, H2O)

Geert Torfs Supervisor, QC

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.