



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 13211 Lot Number A0473052

Description 2-Pyrrolidinone,99%

CAS Number 616-45-5
Quality Test/Release Date 10/Jun/2025
Suggested retest date 10/Jun/2030

Country of Origin UNITED STATES OF AMERICA

Declaration of Origin synthetic

BSE/TSE Not directly derived from or manufactured with any animal byproducts in any way

(Including but not limited to fermentation or nutrient broth, catalysts, enzymes).

Result Name	Units	Specifications	Test Value
Appearance (Color)		Clear colorless to light yellow	Clear light yellow
Appearance (Form)		Liquid or low melting mass	Liquid
Appearance		May darken on storage	May darken on storage
Infrared spectrum		Conforms	Conforms
GC	%	>=98.5	99.8
Refractive index		1.4860 to 1.4880 (20°C, 589 nm)	1.4877 (20°C, 589 nm)

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.