



## **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 27614
Lot Number A0469001

Description Polyvinylpyrrolidone,average M.W. 3500, K12

CAS Number 9003-39-8
Quality Test/Release Date 20/Jan/2025
Suggested retest date 20/Jan/2028

Country of Origin UNITED STATES OF AMERICA

Declaration of Origin synthetic

Result Name	Units	Specifications	Test Value
Appearance (Color)		White to yellowish-white	White
Appearance (Form)		Powder or flakes	Powder
Infrared spectrum		Conforms	Conforms
Identification		Passes test	Passes test
Nitrogen (N)	%	11.5 to 12.8 (on anhydrous substance)	12.0 (on anhydrous substance)
Water	%	=<5.0 (K.F.)	0.03 (K.F.)
Heavy metals (as Pb)	ppm	=<10	=<1
Sulfated ash	%	=<0.1	=<0.01
pH		3.0 to 5.0 (5 % in water)	3.8 (5 % in water)
Aldehyde	%	=<0.05	0.0068
Hydrazine (N2H4)	ppm	=<1	=<1
HPLC	ppm	=<10 1-Vinylpyrrolidin-2-one	1.7 1-Vinylpyrrolidin-2-one
HPLC	%	=<3.0 2-Pyrrolidone	=<0.01 2-Pyrrolidone
Peroxides	ppm	=<400 (Titanyl sulphate method)	29 (Titanyl sulphate method)
Appearance of solution		(5 % in water at 25°C) Free of haze(5 % in water at 25°C) Free of haze	
Appearance of solution		(Ph. Eur.) Clear and not more intensely colored than ref. B6	(Ph. Eur.) Clear and not more intensely colored than ref. B6
Appearance of solution		(Ph. Eur.) Clear and not more intensely colored than ref. BY6	(Ph. Eur.) Clear and not more intensely colored than ref. BY6
Appearance of solution		(Ph. Eur.) Clear and not more intensely colored than ref. R6	(Ph. Eur.) Clear and not more intensely colored than ref. R6
K-value		10.2 to 13.8 (5 % solids w/v aq. soln.)	12.7 (5 % solids w/v aq. soln.)

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.