

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	13235
Lot Number	A0468167
Description	Riboflavin,98%
CAS Number	83-88-5
Quality Test/Release Date	23/Dec/2024
Suggested retest date	23/Dec/2027
Country of Origin	CHINA
Declaration of Origin	plant
BSE/TSE	The product is made by fermentation of soybean oil

Result Name	Units	Specifications	Test Value
Appearance (Color)		Yellow to orange	Orange
Appearance (Form)		Powder	Powder
Infrared spectrum		Conforms	Conforms
UV spectrophotometry	%	>=97.5 (lambda max. 444 nm)	98.6 (lambda max. 444 nm)
UV spectrophotometry		(A (1%/1 cm) 328, on dried substance)	(A (1%/1 cm) 328, on dried substance)
Specific optical rotation	nm	-115° to -135° (20°C, 589 (c=0.5,0.05M NaOH)	-130° (20°C, 589) (c=0.5,0.05M NaOH)
Specific optical rotation		within 30 min., on dried substance	within 30 min., on dried substance
Loss on drying	%	=<1.5 (105°C)	0.47 (105°C)
Sulfated ash	%	=<0.1	0.05
Ratio of Absorbances		0.31 to 0.33 (A373/A267)	0.32 (A373/A267)
Ratio of Absorbances		0.36 to 0.39 (A444/A267)	0.38 (A444/A267)
Additional info		lumiflavine: passes test	lumiflavine: passes test

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.

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of the catalogue number listed above.