



800 Kaderly Dr
Columbus, OH 43228-1034
USA

Certificate of Analysis

500306
GFS-98981

Tel: 800.858.9682 . 740.881.5501
Fax: 740.881.5989

www.gfschemicals.com

Product name: WATERMARK KARL FISCHER WATER STANDARD, 0.05 mg/g (50 ppm)
Item #: 2311
Lot #: 24011020

Certified Values:

Specifications	Status	Results
Water (Reported Value +/-0.003 mg/g)	Report	0.051
NIST Traceable	Report	SRM 2890

Comments

CoA #: COA-108741 **Best by:** June 19, 2029
Certificate Created By: Kaycee Blum **Print Date:** December 20, 2024
CoA Creation Date: July 16, 2024
Certified by: Aron Becza - Quality Assurance Manager

Aron Becza

Traceability:

This material was processed under a quality management system that is registered to ISO 9001:2015. The equipment used in the testing of material is NIST traceable. In cases where NIST traceability is not possible, equipment manufacturer recommendations and/or industry best practices are followed.

The following tests are performed under an A2LA accredited ISO/IEC 17025 management system:

- UV/VIS Spectrophotometer testing is performed according to ASTM method E169-16
- Turbidity according to ASTM methods D6855-17 and ASTM D7315-17
- Conductivity according to ASTM method D1125-14
- pH according to ASTM method D1293-18
- Karl Fischer titration according to ASTM methods DE203-16 and E1064-16

Samples for testing are obtained using GFS procedure GFSW-LAB-PPG-0022.

Testing is performed in a laboratory temperature of 22 °C +/- 2 °C and/or a solution temperature of 25 °C +/- 0.2 °C.

Karl Fischer testing is performed at a laboratory temperature of 25 °C +/- 5 °C and a relative humidity of less than or equal to 60%.

Measurement Uncertainty:

The reported measurement uncertainty is an expanded measurement uncertainty according to the ASTM method E2554-18, calculated using 2 as the coverage factor (which gives a confidence level of approximately 95%).

-Example for a reported conductivity value of 2124 uS/cm:
2124uS/cm ± 0.65%, k=2

-Example for a reported pH value of 8.32:
8.32 ± 0.01, K=2

-Karl Fischer for values between 0.1 to 10 mg/g
o Example for a reported Karl Fischer value of 5.3 mg/g:
5.3mg/g ± 3.76%, k=2

Not for direct use in food, cosmetics, finished pharmaceuticals or drug products. Supplier is not responsible for compliance with FDA Current Good Manufacturing Practices (cGMP), including without limitation for those finished drug products in 21 CFR Parts 210 and 211. Consult warranty limitations at www.gfschemicals.com For resale by GFS authorized distributors only.

24011020