

# Analytical Standard Certificate of Analysis



**Toxin** Aflatoxin (10/1/1/1)  
19.231 µg/mL Aflatoxin B1  
1.923 µg/mL Aflatoxin B2  
1.923 µg/mL Aflatoxin G1  
1.923 µg/mL Aflatoxin G2

**Product number** TSL-183-1  
**Lot number** 200901-247  
**Expiration date** September 3, 2021  
**Volume** 1mL  
**Solvent** Methanol  
**Storage** ≤ 8°C  
**Purity** ≥ 98.0%

## Assigned values and uncertainties

Compound	Mass Concentration	
	Assigned Value	Uncertainty*
Aflatoxin B1	18.3 µg/mL	± 1.54 µg/mL
Aflatoxin B2	1.92 µg/mL	± 0.16 µg/mL
Aflatoxin G1	1.89 µg/mL	± 0.16 µg/mL
Aflatoxin G2	1.87 µg/mL	± 0.16 µg/mL

\* Expanded uncertainty at a 95% confidence level (k = 2). All calculations of expanded uncertainty are based on the criteria outlined in the JCGM 100:2008; Guide to the Expression of Uncertainty in Measurement.  
Concentrations were determined using extinction coefficients from GIPSA document MAM-1r01 revision 1

Craig Humphrey – Chemistry Production Manager

September 3, 2020

This certificate of analysis verifies the analytical standard passes the required specifications and is released for sale. This analytical standard is produced at Trilogy Analytical Laboratory however, is not under the Trilogy ISO 17034 scope of accreditation. This document has been electronically signed.

## **Intended use of the Analytical Standards**

Analytical Standards can be used for verification of laboratory performance, matrix fortification, method development and optimization, calibration curves, trouble shooting, method validation, and calculating recovery corrections for the analysis of mycotoxins by HPLC, GC, MS, MSMS, or TLC.

## **Instructions for use**

Use the certificate of analysis provided assigned values to calculate the volumes of standard needed to perform the function in which you desire. It is important to note that if you are diluting Trilogy Analytical Standards for use as calibrates that fresh standard dilutions should be made daily. Please feel free to contact Trilogy Analytical Laboratory for any assistance needed pertaining to calculations or use.

## **Special instructions for TS (Insitu) Analytical Standards**

For Trilogy TS (Insitu) Analytical Standards reconstitute with a class A volumetric pipette. Solvents for reconstitution are indicated in the certificate of analysis "Solvent", use only HPLC grade or superior solvents. Volume to be used for reconstitution is indicated in the certificate of analysis "Volume". Recommend temperature for reconstitution is 23°C ( $\pm$  2°C). Cap the vial and vortex for a minimum of 30 seconds.

## **Safety precautions**

Good laboratory practices should be observed while handling all Trilogy Analytical Standards. Follow the recommended precautionary measures (OSHA 29 CFR 1910.1450) for handling chemicals and powders. Avoid contact with eyes, skin, and clothing. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. For specific product Safety Data Sheets contact Trilogy Analytical Laboratory.

## **Further information**

Trilogy Analytical Standards are for laboratory use only. Trilogy does not make any warranties, expressed or implied, in connection to Analytical Standards other than the product meets the quality control specifications at Trilogy Analytical Laboratory. Trilogy Analytical Standards are to be used at the purchaser's discretion. In no way, does Trilogy accept responsibly for the use or work performed by the purchaser.

This product is an Analytical Standard, not a Certified Reference Material under the Trilogy ISO 17034:2016 Scope of Accreditation.