



# Trilogy<sup>®</sup> mycotoxin reference materials and standards

**Trilogy<sup>®</sup> Analytical Laboratory offers various reference materials and analytical standards for the quality assurance of mycotoxin analysis.**

Trilogy<sup>®</sup> mycotoxin reference materials are naturally contaminated homogeneous products that contain a specific concentration of one or more mycotoxins. These reference materials have various applications including daily quality assurance, technician training, troubleshooting, proficiency testing, quality documentation and method validation. Reference materials are available containing the major mycotoxins in various matrices and levels of contamination: Aflatoxin, Ochratoxin, Zearalenone, Deoxynivalenol and Fumonisin contaminated material are available, as well as multi-toxin containing reference materials. Commodities include corn and corn by-products, wheat and wheat products, barley and malted barley, oats, rice and coffee as well as complex products like animal feed. Samples are available in 100 g, 500 g and 1 kg re-sealable foil packs.

Trilogy<sup>®</sup> also provides over 40 analytical standards for a wide range of mycotoxins, in solvents and in dry form.

The Trilogy<sup>®</sup> standards can be used for spiking experiments in order to check laboratory performance or for the analysis of mycotoxins by HPLC, GC or LC-MS/MS. The Trilogy<sup>®</sup> dried standards are very easy to use. A simple reconstitution step reduces the need to handle hazardous mycotoxin powders.

The Trilogy<sup>®</sup> liquid standards are ready to use and contain mycotoxins in dissolved specified organic solvents. They are both intended for use by customers who do not have a spectrophotometer or for those who want to ensure accurate HPLC/LC-MS/MS determination of mycotoxins with minimal preparation and effort. Shelf life for both types of mycotoxin standards is typically 12 months after production; in addition to that the Trilogy<sup>®</sup> dried standards have a 6 months shelf life after reconstitution.



### Trilogy® Mycotoxin reference material

- Naturally contaminated materials
- Single and multi-toxins
- Cereals
- Complex materials such as feed



### Trilogy® mycotoxin standard substances

- Dried standard substances
- Ready-to-use standards
- Single toxin and toxin groups



## Mycotoxins

### Mycotoxin standards

Product	Description	No. of tests/amount	Art. No.
<b>Aflatoxins</b>			
<b>Dried</b>			
Trilogy® Dried Standard Aflatoxins B1, B2, G1, G2	Aflatoxins B1, B2, G1, G2 (4:1:4:1) (2/0.5/2/0.5 µg/mL)	5 µg/mL after reconstitution	TS-108
Trilogy® Dried Standard Aflatoxin B1	Aflatoxin B1	25 µg/mL after reconstitution	TS-104
Trilogy® Dried Standard Aflatoxin B2	Aflatoxin B2	25 µg/mL after reconstitution	TS-105
Trilogy® Dried Standard Aflatoxin G1	Aflatoxin G1	25 µg/mL after reconstitution	TS-106
Trilogy® Dried Standard Aflatoxin G2	Aflatoxin G2	25 µg/mL after reconstitution	TS-107
Trilogy® Dried Standard Aflatoxin M1	Aflatoxin M1	1 µg/mL after reconstitution	TS-130
<b>Liquid</b>			
Trilogy® Liquid Standard Aflatoxins B1, B2, G1, G2	Aflatoxin B1, B2, G1, G2 (4:1:4:1) 5 µg/mL (2/0.5/2/0.5 µg/mL) in acetonitril	10 ml	TSL-108
AFLASTANDARD	Total aflatoxin standard (B1, B2, G1, G2) solution at 1000 ng/mL (250 ng/ml each) in methanol	6 ml 3 ml	RBRP22 RBRP22A
Trilogy® Liquid Standard Aflatoxin B1	Aflatoxin B1 25 µg/mL in acetonitrile	10 ml	TSL-104
Trilogy® Liquid Standard Aflatoxin B2	Aflatoxin B2 25 µg/mL in acetonitrile	10 ml	TSL-105
Trilogy® Liquid Standard Aflatoxin G1	Aflatoxin G1 25 µg/mL in acetonitrile	10 ml	TSL-106
Trilogy® Liquid Standard Aflatoxin G2	Aflatoxin G2 25 µg/mL in acetonitrile	10 ml	TSL-107
Trilogy® Liquid Standard Aflatoxin M1	Aflatoxin M1 0.5 µg/mL in acetonitrile	2 ml	TSL-143
M1 STANDARD	Aflatoxin M1 standard solution at a concentration of 1000 ng/mL in acetonitrile	6 ml	RBRP42
<b>Ochratoxin A</b>			
<b>Dried</b>			
Trilogy® Dried Standard Ochratoxin A	1 µg/mL after reconstitution	1 µg/mL after reconstitution	TS-503
<b>Liquid</b>			
Trilogy® Liquid Standard Ochratoxin A	Ochratoxin A 10 µg/mL in methanol	5 ml	TSL-504
OCHRASTANDARD	Ochratoxin A standard solution at a concentration of 1000 ng/mL in methanol	6 ml 3 ml	RBRP11 RBRP11A



## Mycotoxins

### Mycotoxin standards

Product	Description	No. of tests/amount	Art. No.
<b>Zearalenone</b>			
<b>Dried</b>			
Trilogy® Dried Standard Zearalenone	Zearalenone	25 µg/mL after reconstitution	TS-401
<b>Liquid</b>			
Trilogy® Liquid Standard Zearalenone	Zearalenone 25 µg/mL in methanol	10 mL	TSL-401
ZEASTANDARD	Zearalenone standard solution at a concentration of 1000 ng/ml in acetonitrile	3 mL	RBRP44A
<b>DAS</b>			
<b>Dried</b>			
Trilogy® Dried Standard Diacetoxyscirpenol (DAS)	Diacetoxyscirpenol (DAS)	100 µg/mL after reconstitution	TS-316
<b>DON (Vomitoxin)</b>			
<b>Dried</b>			
Trilogy® Dried Standard DON	Deoxynivalenol	50 µg/mL after reconstitution	TS-310
Trilogy® Dried Standard Deoxynivalenol (DON)	Deoxynivalenol (DON)	100 µg/mL after reconstitution	TS-317
Trilogy® Dried Standard 3-Acetyl Deoxynivalenol	3-acetyl deoxynivalenol	100 µg/mL after reconstitution	TS-342
Trilogy® Dried Standard 15-Acetyl Deoxynivalenol	15-acetyl deoxynivalenol	100 µg/mL after reconstitution	TS-343
<b>Liquid</b>			
Trilogy® Liquid Standard Deoxynivalenol (DON)	Deoxynivalenol (DON) 100 µg/mL in methanol	10 ml	TSL-317
<b>Fusarenon X</b>			
<b>Dried</b>			
Trilogy® Dried Standard Fusarenon X	Fusarenon X	100 µg/mL after reconstitution	TS-351
<b>Fumonisin</b>			
<b>Dried</b>			
Trilogy® Dried Standard Fumonisin B1, B2	Fumonisin B1, Fumonisin B2 (10:3)	100/30 µg/mL after reconstitution	TS-202
<b>Liquid</b>			
Trilogy® Liquid Standard Fumonisin B1, B2	Fumonisin B1, Fumonisin B2 (10:3) 100/30 µg/mL in acetonitrile/water (50/50)	2 ml	TSL-202
Trilogy® Liquid Standard Fumonisin B1	Fumonisin B1 100 µg/mL in acetonitrile/water (50/50)	5 ml	TSL-204
Trilogy® Liquid Standard Fumonisin B2	Fumonisin B2 100 µg/mL in acetonitrile/water (50/50)	2 ml	TSL-205
<b>Neosolaniol</b>			
<b>Dried</b>			
Trilogy® Dried Standard Neosolaniol	Neosolaniol	100 µg/mL after reconstitution	TS-328
<b>Nivalenol</b>			
<b>Dried</b>			
Trilogy® Dried Standard Nivalenol	Nivalenol	100 µg/mL after reconstitution	TS-344



## Mycotoxins

### Mycotoxin standards

Product	Description	No. of tests/amount	Art. No.
<b>T-2/HT-2</b>			
<b>Dried</b>			
Trilogy® Dried Standard T-2 Toxin	T-2 Toxin	100 µg/mL after reconstitution	TS-314
Trilogy® Dried Standard HT-2 Toxin	HT-2 Toxin	100 µg/mL after reconstitution	TS-333
<b>Liquid</b>			
Trilogy® Liquid Standard T-2 Toxin	T-2 Toxin 100 µg/mL in acetonitrile	5 ml	TSL-314
Trilogy® Liquid Standard HT-2 Toxin	HT-2 Toxin 100 µg/mL in acetonitrile	5 ml	TSL-333
<b>Trichothecenes – Multitoxines</b>			
<b>Liquid</b>			
Trilogy® Liquid Standard Type A & B Trichothecenes	Type A & B Trichothecenes (Fusarenon X, Deoxynivalenol, Nivalenol, 3- & 15-Acetyl DON, HT-2 Toxin, Diacetoxyscirpenol, T-2 Toxin, Neosolaniol) 100 µg/mL in acetonitrile	2 ml	TSL-307
<b>Dried</b>			
Trilogy® Dried Standard Type A Trichothecenes	Type A Trichothecenes (Diacetoxyscirpenol, HT-2 Toxin, T-2 Toxin, Neosolaniol)	10 µg/mL after reconstitution	TS-353
<b>Citrinin</b>			
<b>Dried</b>			
Trilogy® Dried Standard Citrinin	Citrinin	5 µg/mL after reconstitution	TS-904
<b>Patulin</b>			
<b>Liquid</b>			
Trilogy® Liquid Standard Patulin	Patulin 25 µg/mL in acetonitrile	5 ml	TSL-601



## Mycotoxins

### Reference material for mycotoxin analysis

Product	Description	No. of tests/amount	Art. No.
<b>Reference material</b>	<b>Food or feed product</b>		
Trilogy® Reference Material Aflatoxin	Commodities available upon request	100 gram 500 gram 1000 gram	TR-A100 TR-A500 TR-A1000
Trilogy® Reference Material Ochratoxin	Commodities available upon request	100 gram 500 gram 1000 gram	TR-O100 TR-O500 TR-O1000
Trilogy® Reference Material Zearalenon	Commodities available upon request	100 gram 500 gram 1000 gram	TR-Z100 TR-Z500 TR-Z1000
Trilogy® Reference Material Deoxynivalenol	Commodities available upon request	100 gram 500 gram 1000 gram	TR-D100 TR-D500 TR-D1000
Trilogy® Reference Material Fumonisin	Commodities available upon request	100 gram 500 gram 1000 gram	TR-F100 TR-F500 TR-F1000
Trilogy® Reference Material Multitoxin	Commodities and mycotoxins available upon request	100 gram 500 gram 1000 gram	TR-MT100 TR-MT500 TR-MT1000
Trilogy® Reference Material Complex commodities; Single & Multitoxin	Commodities and mycotoxins available upon request	100 gram 500 gram 1000 gram	TR-CC100 TR-CC500 TR-CC1000