

Certificate of Analysis (COA)

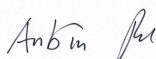
Product Name: Ultimine™ Koji Fermented Mineral-Koji Zinc Code 410512

Description: Inactivated and dried *Aspergillus oryzae* powder with no less than 5.5% zinc

Batch number: 210902
 Manufacturing date: 2021.09.09
 Date of Acceptance: 2021.09.27
 Retesting Date: 2024.09.08

	Specification	Results	Ref. of Methods
Organoleptic Quality			
Appearance	Powder	Conform	Visual
Color	Light gray to light brown	Conform	Visual
Flavor	Characteristic	Conform	Sensory
Analytical Quality			
¹ Identity	DNA	Conform	True ID by Purity® IQ
Zinc content, as is	5.5%-6.5%	5.6 %	ICP-OES GB 5009.268-2016 2 nd mod. by Eurofins, China
Loss on drying	< 10%	4.5%	GB 5009.3-2016
Particle size	> 95% 40 mesh (420µm)	Conform	ASTM standard
Bulk density	0.3-0.7 g/mL	Conform	ASTM D1895B mod.
Total heavy metals	< 10 ppm	Conform	ICP-MS BS EN ISO 17294-2 2016 by Eurofins, China
Plumbum	< 3 ppm	Conform	
Arsenic	< 1 ppm	Conform	
Cadmium	< 1 ppm	Conform	
Mercury	< 0.1 ppm	Conform	
² Aflatoxin B1	< 5 ppb	Conform	USP 561 mod. By Eurofins, US
² Aflatoxin B1+B2+G1+G2	< 10 ppb	Conform	USP 561 mod. By Eurofins, US
² Pesticides residues	Comply with USP and Eur. Reg 396/2005	Conform	Ph.Eur. 2.8.13 by Eurofins, Germany
Microbiological Quality			
Total plate count	< 10,000 cfu/g	Conform	ISO4833-1:2013
Yeasts and Molds	< 100 cfu/g	Conform	ISO21527-2:2008
<i>Salmonella</i>	Negative/25 g	Negative	ISO6579:2017
<i>E.coli</i>	Negative/g	Negative	ISO7251:2005
² <i>Staphylococcus aureus</i>	Negative/25 g	Negative	ISO 6888-1:2003 by Eurofins, China

1. A TRU-ID™ certificate is provided by Purity™IQ of Canada by testing DNA of one mother culture of production lots. The test is conducted every two years on the same batch of the mother culture or at the time using a new batch of mother culture.
2. Annual testing of one random production batch by Eurofins laboratories.



May 10, 2023