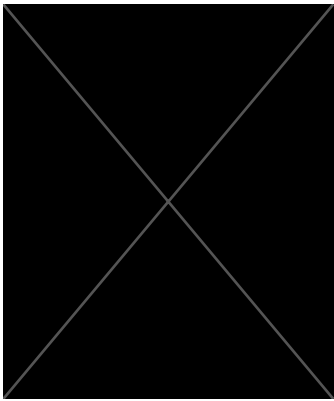




CERTIFICATE OF ANALYSIS

Organic product certified by FR-BIO-01

Product and Batch Informations			
ORGANIC ASHWAGANDHA EXTRACT KSM-66			
REF : KSM66			
Latin name	Withania somnifera	Plant part	Root
Solvent (%)	100% water	Carrier (%)	None
Extract ratio	10-12/1	Country of origin	Asia
Batch	KSM/VG/21/S517	Country of manufacturing	Asia
MF date	10/2021	Expiration date	09/2024

ANALYSIS ITEM	SPECIFICATION	RESULT	TEST METHOD
Active Ingredients/Substance to control			

Assay	NLT 5% withanolides	5,28%	HPLC
	Witaferin A	<0,1%	HPLC

Physical Control			
Appearance**	Light yellowish brown powder	Complies	Visual
Sieve analysis	>85% pass 80 mesh	Complies	Sieve analysis
Loss on drying	NMT 5%	2,96%	USP
pH	4-6	4,59	USP
Bulk density	0,2-0,6 g/cc	0,58 g/cc	USP
Tapped bulk density	0,2-0,8g/cc	0,78 g/cc	USP
Ash	NMT 8%	5,30%	USP

Chemical Control*			
Lead (Pb)	NMT 3ppm	Complies	AOAC
Arsenic (As)	NMT 2ppm	Complies	AOAC
Cadmium(Cd)	NMT 1ppm	Complies	AOAC
Mercury (Hg)	NMT 0,1ppm	Complies	AOAC
Aflatoxins (B1, B2, G1, G2)	<5ppb	Below detection limit	USP
Sum of PAH	NMT 50ppb	< 0,5 ppm	GC-MS
Benzo(a)pyrene	NMT 10ppb	Not detected	GC-MS
Pesticides residues	Below limit of quantification	Complies	As per AOAC 20th edition
Ethylene oxide	NMT 0,01 ppm	< 0,01 ppm	GC-MS-MS

Microbiological Control			
Total aerobic microbial	< 10 000 cfu/g	< 1000cf/g	USP
Tot. Fungal count	< 1 000 cfu/g	< 100cfu/g	USP
Total enterobacteriaceae	< 100 cfu/g	< 10cfu/g	USP
Salmonella	Absent/10g	Not detected	USP
E.Coli	Absent/g	Not detected	USP
S. aureus	Absent/g	Not detected	USP

Allergens/GMO/Irradiation		
Allergens	Allergen free/specify if any	Complies
GMO	Non OGM	Complies
Irradiation	Non irradiation	Complies

Packing and Storage	
Packing	Suitable for food industry
Storage	In a cool and dry place, away from light

*According to a control plan

**Depending to variations of raw material

