

# CERTIFICATE OF ANALYSIS

## Product and Batch Informations

MAGNESIUM MALATE

ref: MALATEMG001

Batch	20211210	Origin (natural/synthetic)	Synthetic
N° CAS	6150-86-3	Country of origin	Asia - China
MF date	10/12/2021	Expiration date	09/12/2023

ANALYSIS ITEM	SPECIFICATION	RESULT	TEST METHOD
<b>Active Ingredients/Substance to control</b>			
Assay	11,3-11,8% of magnesium	11,71%	QB
<b>Physical/Chemical Control</b>			
Appearance	White granular crystals or powders	Complies	Organoleptic
Loss on drying	NMT 27%	23,58%	5g/105°/2hrs
pH	5-9	6,8	QB
Ash	18-21%	19,34%	5g/105°/2hrs
Particle size	98% pass 60 mesh	Complies	mesh screen
<b>Contaminant Control*</b>			
Heavy metals	NMT 10ppm	Complies	AAS
Lead (Pb)	NMT 3ppm	Complies	AAS
Arsenic (As)	NMT 2ppm	Complies	AAS
Cadmium(Cd)	NMT 1ppm	Complies	AAS
Mercury (Hg)	NMT 0,1ppm	Complies	AAS
Ethylene oxide (sum of ethylene oxide and 2-chloro-ethanol expressed as ethylene oxide)	No applicable limit **	< 0,01 ppm	GC-MS-MS
<b>Microbiological Control</b>			
Total aerobic microbial	NMT 20 000 cfu/g	Complies	USP
Tot. yeast and mould	NMT 200 cfu/g	Complies	USP
Salmonella	Negative/25g	Not detected	USP
E.Coli	Negative/g	Not detected	USP
<b>Allegations</b>			
Allergens	Allergen free		
GMO	No OGM		
Irradiation	No irradiation		
<b>Packing and Storage</b>			
Packing	Suitable for food industry		
Storage	Store in dry places and keep away from strong direct light and heat.		

\*According to a control plan

\*\*« According to meeting on Ethylene oxide on october 2021, applicable limit of ethylene oxide for food supplement, some minerals and additives (except in specific case) is 0.1ppm »

