

CERTIFICATE OF ANALYSIS

L-Glutathione Reduced (JP15)

BATCH N°: B210879
QUANTITY: 200 Kg

MAF.DATE: 18-08-2021
EXP.DATE: 17-08-2024

ITEM	STANDARD	RESULTS
Description	A white crystalline powder	A white crystalline powder
Melting point	About 185°C	186.0°C
Identification IR	Similar with the reference spectrum	Complies
Optical Rotation	-15.5° to -17.5°	-16.4°
Clarity and color of solution	Clear and colorless	Clear and colorless
Heavy metals	Not more than 10 ppm	Complies
Arsenic	Not more than 2 ppm	Complies
Iron	Not more than 10 ppm	Complies
Cadmium	Not more than 1 ppm	Complies
Lead	Not more than 3 ppm	Complies
Mercury	Not more than 0.1 ppm	Complies
Related Substances Total	Not more than 2.0%	0.8 %
Related Substances GSSG	Not more than 1.5%	0.4 %
Loss on drying	Not more than 0.5%	0.3 %
Residue on ignition	Not more than 0.1%	0.05 %
Assay	98.0% to 101.0%	99.0 %
Total plate count	≤1000cfu/g	Complies
Yeast and mold count	≤100cfu/g	Complies
Total coli forms	≤100cfu/g	Complies
E.coli	Absent/10g	Complies
S.aureus	Absent/10g	Complies
Salmonella	Absent/10g	Complies

Conclusion: Complies with the standard JP15
CAS n°: 70-18-8
Packing: 25 Kg/drum

1 Certificate of analysis is received from our supplier (Boavit Nutrition S.L.)

CERTIFICATE OF ANALYSIS

L-Glutathione Reduced (JP17)

BATCH N°: B220189
QUANTITY: 200 Kg

MAF.DATE: 26-01-2022
EXP.DATE: 25-01-2025

ITEM	STANDARD	RESULTS
Description	A white crystalline powder	A white crystalline powder
Melting point	About 185°C	185.5°C
Identification IR	Similar with the reference spectrum	Complies
Optical Rotation	-15.5° to -17.5°	-16.2°
Clarity and color of solution	Clear and colorless	Clear and colorless
Heavy metals	Not more than 10 ppm	Complies
Arsenic	Not more than 2 ppm	Complies
Iron	Not more than 10 ppm	Complies
Cadmium	Not more than 1 ppm	Complies
Lead	Not more than 3 ppm	Complies
Mercury	Not more than 0.1 ppm	Complies
Related Substances Total	Not more than 2.0%	1.4 %
Related Substances GSSG	Not more than 1.5%	0.44 %
Loss on drying	Not more than 0.5%	0.3 %
Residue on ignition	Not more than 0.1%	0.02 %
Assay	98.0% to 101.0%	98.9 %
Total plate count	≤1000cfu/g	Complies
Yeast and mold count	≤100cfu/g	Complies
Total coli forms	≤100cfu/g	Complies
E.coli	Absent/10g	Complies
S.aureus	Absent/10g	Complies
Salmonella	Absent/10g	Complies

Conclusion: Complies with the standard JP17

CAS n°: 70-18-8

Packing: 25 Kg/drum

| Certificate of analysis as received from our supplier | Boavit Nutrition S.L. |

CERTIFICATE OF ANALYSIS

Methylsulfonylmethane (MSM)

BATCH N°: 20220326
QUANTITY: 9000Kg

MAF.DATE: 26-03-2022
EXP.DATE: 25-03-2025

ITEM	STANDARD	RESULTS
Appearance	White crystalline powder	White crystalline powder
Residue on ignition	0.10%Max	<0.01%
Heavy metals	5ppmMax	<5ppm
Lead (Pb)	3ppmMax	<3ppm
Cadmium (Cd)	1ppmMax	<1ppm
Arsenic (As)	1ppmMax	<1ppm
Mercury (Hg)	0.1ppmMax	<0.1ppm
Melting point	108.0°-110.0°C	108.5°C
Water content	0.50%Max	0.15 %
DMSO content	Free	Free
Particle size	≥50%Through 20-40 mesh ≥20%Through 40-60 mesh <10%Through 60-80 mesh <5%Through 80mesh above	68% 23% 6.8% 2.2%
Assay	99.90%Min	99.93 %
Bulk density	≥0.65g/ml	0.78
Total plate count	<10cfu/g	<10cfu/g
Yeast/Mold	<10cfu/g	<10cfu/g
Coliform	Negative	Negative
E.Coli	Negative	Negative
Salmonella	Negative	Negative
Staphylococcus	Negative	Negative

Conclusion: Pass test according to the Enterprise Standard

Analysis date: 27-03-2022

CAS n°: 67-71-0

Packaging: in 25 kg net cardboard drum with two plastic bags