



Whole Maqui Berry (*Aristotelia chilensis*)
 Freeze-dried Powder With Seeds
MaquiMNL
TECHNICAL SPECIFICATIONS

DESCRIPTION		
Botanical Name	<i>Aristotelia chilensis</i>	
Plant used part	Whole fruit	
Indian Name	“ Maqui “	
Fruit Origin	Patagonia area in Southern Chile, South America	
Manufacturer	Maqui New Life S.A.	
Excipients or Carriers	None, 100% whole berry fruit with seeds	
PHYSICAL PROPERTIES OF WHOLE MAQUI FREEZE-DRIED POWDER		
Moisture % w/w	< 4.0	
Density (g/ml)	0.6	
Aspect	Dark purple, coarse powder	
Average Mesh Size	40 mesh size	
Taste	Good taste, typically fresh maqui fruit	
Water Solubility	Partial	
ACTIVE PHYTONUTRIENTS OF WHOLE MAQUI FREEZE-DRIED POWDER		
Total ORAC _{FN Brunswick Lab} (μmol TE/ g of Maqui freeze-dried product)	> 6'000	
Total ANTHOCYANINS mg/100g of Maqui freeze-dried product	> 2'500	
Total DELPHINIDINS mg/100g of Maqui freeze-dried product	> 1'900	
Total Dietary Fiber g /100 g	> 55.0	
Insoluble Dietary Fiber g/100g	> 53.0	
Soluble Dietary Fiber g/100g	> 2.0	
MICROBIOLOGICAL COUNT OF MAQUI FREEZE-DRIED POWDER		REFERENCE (*)
		Values
TAMC Total Aerobic Microbial Count	Acc TM/0351	< 10'000 cfu/g
TYMC Total Combined Yeast/Moulds Count	Acc TM/0352	< 1'000 cfu/g
Bile-Tolerant Gram- Negative Bacteria	Acc TM/0357	<100 cfu/g
Escherichia Coli	Acc TM/0353	Absent /g
Salmonella	Acc TM/0354	Absent /25g
Pseudomonas Aeruginosa	Acc TM/0356	Absent /g
Staphylococcus Aureus	Acc TM/0355	Absent /g
		(*) acc Ph. Eur (2.6.12) and

(2.6.13)

NUTRITIONAL INFORMATION (Average quantity per 100 g)	Reference	Values
Energy, Kcal	Test Atwater	188
Ash, g	Test Water&Soil , ISP 1998	2.5
Proteins, g (f=6,25)	Test Kjeldhal. ISP 1998	6.5
Total Dietary Fiber, g	Enzimatic Test. AOAC 12 th Ed, 985.29	60.4
Soluble Dietary Fiber, g	Enzimatic Test. AOAC 12 th Ed, 985.29	3.0
Insoluble Dietary Fiber, g	Enzimatic Test. AOAC 12 th Ed, 985.29	57.4
Total Fat, g	Acidic hydrolysis, ISP 1998	10.0
Available Carbohydrates, g	By difference	18.1
Total sugars, g	Munson & Walkers, ISP 1998	16.3
Sodium, mg	Atomic Absorption	50.5

HEAVY METALS ANALYSIS OF MAQUI FREEZE-DRIED POWDER	REFERENCE (*)	Values
Lead	AOAC 19 th Ed 2012, ICP_AES	< 1.0
Mercury	AOAC 19 th Ed 2012, ICP_AES	< 2.4
Cadmium	AOAC 19 th Ed 2012, ICP_AES	< 0.5
Arsenic	AOAC 19 th Ed 2012, ICP_AES	< 1,0
MINERALS OF MAQUI FREEZE DRIED POWDER		
(acc AOAC 19 th edition 2012, ICP-ES)		
Calcium (mg/Kg)	2'860	
Copper (mg/Kg)	8.0	
Iron (mg/Kg)	302.5	
Manganese (mg/Kg)	13.0	
Magnesium (mg/Kg)	735.0	
Potassium (mg/Kg)	9'600	

Selenium (mg/Kg)	< 0.2
Zinc (mg/Kg)	71.5

VITAMINS OF MAQUI FREEZE DRIED POWDER	
(by HPLC-DAD)	
Vit C (mg/100g)	3.97
Vit A (mg/100g)	n/d
Vit E (mg/100g)	3.54

PACKAGING	
Primary Packaging	Vacuum sealed polyethylene bag isolated from light, moisture and oxygen
Secondary Packaging	Kraft drum
Packaging Format	Carton box containing 4 plastic bag LDPE, each bag with 5 Kg net Pallet certified wood with 24 carton boxes
Storage Condition	At room temperature, protected from light and moisture in the original sealed package
Shelf Life at 20-25°C, >60 % RH	24 months in unopened/sealed original package