CERTIFICATE OF ANALYSIS

Manufactured for	**MACKISEN**				
Name of product:	**Maritime Pine Bark Extract**		**NPN-80136598**		
Packaging Lot # :	**M2500811/1**	**Master Packaging Record #**		**Expiry Date :**	**11/2028**
		MPR	**MA-N598-60-V0**		
Manufacturing Lot # :	**M2500811**	**Master Manufacturing Record #:**		**MFG Date:**	**12/2025**
		MMR	**MA-N598-V0**		
Storage Conditions:	Store at room temperature (R.T), in closed dry containers and Keep away from high temperature & moisture.				
Physical Description:	Fine Brownish Yellow powder in clear Veggie "2" capsules	60 count in Bottle-150 cc-45/400 White HDPE Round with Cap-38-400 white HIS P/P,ribbed,plain liner.			

Physical Tests:

TESTES	Results	Specifications Low	Target	High	Strength	Method
Average Wt. of Capsules	259 mg	246	273	300	mg	USP <2091>
Wt. variation of Capsules	Conforms	Conforms as per USP weight variation +/- 10 %				USP <2091>
Odour & Taste	Conforms	Characteristic, Conforms to Standard				Visual, Olfactory
Disintegration	05 min	NMT 30			min	USP <2040>
IDENTITY	Conforms	Conforms to standard				FTIR

Quantity / Potency :	**Results**		**Low**	**Target**	**High**	**Strength**	**Method**
Maritime Pine(Pinus pinaster)65% Procyanidins	200.00	mg	160.00	200.00	240.00	mg	Certified Input
NON-MEDICINAL INGREDIENTS	Rice Powder, Empty Clear Vegetable Capsule Size "2"						

Purity:

MICRO:	**Results**	**Limits**	**Method**
Total Plate Count	<10 CFU/g	<1,00,000 c.f.u / g	USP<2021>/AOAC
Total Yeast	<10 CFU/g	< 10,000 c.f.u / g	USP<2021>/AOAC
Total Mold	<10 CFU/g	< 10,000 c.f.u / g	USP<2021>/AOAC
E.Coli	Not Detected	Not Detected	USP<2022>/AOAC
Salmonella Spp	Not Detected	Not Detected	USP<2022>/AOAC
Staphylococcus Aureus	Not Detected	Not Detected	USP<2022>/AOAC
HEAVY METALS:	**Results**	**Limits - 2 capsules / day**	**Method**
Arsenic	<0.0001 mcg / kg b.w./day	< 0.14 mcg / kg b.w./day	ICP-MS
Cadmium	<0.0001 mcg / kg b.w./day	< 0.09 mcg / kg b.w./day	ICP-MS
Lead	0.0001 mcg / kg b.w./day	< 0.14 mcg / kg b.w./day	ICP-MS
Total Mercury	<0.0001 mcg / kg b.w./day	< 0.29 mcg / kg b.w./day	ICP-MS
Solvent Residue	Complies	Meets USP Requirements	USP/GC
Pesticide Residue	Complies	Meets USP Requirements	USP/GC

Prepared by: Dec/31/2025

Approved by: Dec/31/2025

Quality Assurance

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CERTIFICATE OF ANALYSIS

Manufactured for	**MACKISEN**				
Name of product:	**Maritime Pine Bark Extract**		**NPN-80136598**		
Packaging Lot # :	**M2500811/2**	**Master Packaging Record #**		**Expiry Date :**	**11/2028**
		MPR	**MA-N598-120-V0**		
Manufacturing Lot # :	**M2500811**	**Master Manufacturing Record #:**		**MFG Date:**	**12/2025**
		MMR	**MA-N598-V0**		
Storage Conditions:	Store at room temperature (R.T), in closed dry containers and Keep away from high temperature & moisture.				
Physical Description:	Fine Brownish Yellow powder in clear Veggie "2" capsules	120 count in Bottle-250 cc-45/400 White HDPE Round with Cap-45-400 white HIS P/P,ribbed,plain liner.			

Physical Tests:

TESTES	Results	Specifications Low	Target	High	Strength	Method
Average Wt. of Capsules	259 mg	246	273	300	mg	USP <2091>
Wt. variation of Capsules	Conforms	Conforms as per USP weight variation +/- 10 %				USP <2091>
Odour & Taste	Conforms	Characteristic, Conforms to Standard				Visual, Olfactory
Disintegration	05 min	NMT 30			min	USP <2040>
IDENTITY	Conforms	Conforms to standard				FTIR

Quantity / Potency :	**Results**		**Low**	**Target**	**High**	**Strength**	**Method**
Maritime Pine(Pinus pinaster)65% Procyanidins	200.00	mg	160.00	200.00	240.00	mg	Certified Input
NON-MEDICINAL INGREDIENTS	Rice Powder, Empty Clear Vegetable Capsule Size "2"						

Purity:

MICRO:	**Results**	**Limits**	**Method**
Total Plate Count	<10 CFU/g	<1,00,000 c.f.u / g	USP<2021>/AOAC
Total Yeast	<10 CFU/g	< 10,000 c.f.u / g	USP<2021>/AOAC
Total Mold	<10 CFU/g	< 10,000 c.f.u / g	USP<2021>/AOAC
E.Coli	Not Detected	Not Detected	USP<2022>/AOAC
Salmonella Spp	Not Detected	Not Detected	USP<2022>/AOAC
Staphylococcus Aureus	Not Detected	Not Detected	USP<2022>/AOAC
HEAVY METALS:	**Results**	**Limits - 2 capsules / day**	**Method**
Arsenic	<0.0001 mcg / kg b.w./day	< 0.14 mcg / kg b.w./day	ICP-MS
Cadmium	<0.0001 mcg / kg b.w./day	< 0.09 mcg / kg b.w./day	ICP-MS
Lead	0.0001 mcg / kg b.w./day	< 0.14 mcg / kg b.w./day	ICP-MS
Total Mercury	<0.0001 mcg / kg b.w./day	< 0.29 mcg / kg b.w./day	ICP-MS
Solvent Residue	Complies	Meets USP Requirements	USP/GC
Pesticide Residue	Complies	Meets USP Requirements	USP/GC

Prepared by: Sneha Dec/31/2025

Approved by: BShargav.R Dec/31/2025

Quality Assurance

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