NutraNorth

CERTIFICATE OF ANALYSIS

Manufactured for	**MACKISEN**				
Name of product:	**Vitamin K2**			**NPN**	**80133278**
Packaging Lot # :	**M2500536/1**	**Master Packaging Record #**		**Expiry Date :**	**08/2028**
		MPR	**MA-N278-60-V0**		
Manufacturing Lot # :	**M2500536**	**Master Manufacturing Record #:**		**MFG Date:**	**09/2025**
		MMR	**MA-N278-V0**		
Storage Conditions:	Store at room temperature (R.T), in closed dry containers and Keep away from high temperature & moisture.				
Physical Description:	White powder in clear Veggie "2" capsules.		60 count in Bottle-150 cc-38/400 White HDPE Round with Cap-38-400 white HIS P/P,ribbed,plain liner.		

Physical Tests:

TESTS	Results		Specifications Low	Target	High	Strength	Method
Average Wt. of Capsules	315 mg		288	320	352	mg	USP <2091>
Wt. variation of Capsules	Complies		Conforms as per USP weight variation +/- 10 %				USP <2091>
Odour & Taste	Complies		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**
Vitamin K2 (Menaquinone 7)	126.15	mcg	108.00	120.00	192.00	mcg	JPL-021.00 (Titration)
NON-MEDICINAL INGREDIENTS	Empty Clear Vegetable Capsule Size "2"						

Purity:

MICRO:	Results	Limits	Method
Total Plate Count	80 c.f.u / g	< 3,000 c.f.u / g	USP <2021/2022>
Total Yeast	<10 c.f.u / g	< 300 c.f.u / g	USP <2021/2022>
Total Mold	<10 c.f.u / g	< 300 c.f.u / g	USP <2021/2022>
E.Coli	Not Detected	Not Detected	USP <2021/2022>
Salmonella Spp	Not Detected	Not Detected	USP <2021/2022>
Staphylococcus Aureus	Not Detected	Not Detected	USP <2021/2022>
HEAVY METALS:	**Results**	**Limits -1 capsule /day**	**Method**
Arsenic	<0.0003 mcg / kg b.w./day	< 0.14 mcg / kg b.w./day	ICP-MS
Cadmium	0.0002 mcg / kg b.w./day	< 0.09 mcg / kg b.w./day	ICP-MS
Lead	0.0042 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

Prepared by: Neelima Dec/03/2025

Approved by: Bhargavi Dec/03/2025

Quality Assurance

This report is submitted for the exclusive use of the person(s), partnership(s), or corporation(s) to whom it is addressed. Neither the report, name NutraNorth Inc., nor its staff may be used in conjunction with the advertising, or sale of any product or process without written consent. This information is the exclusive property of NutraNorth Inc. and may not be reproduced in whole or part without exclusive written authorization.

F.75-R1-P1 -07/2016

NutraNorth
1330 Fewster Dr, Mississauga
ON,L4W 1A4, Canada
Phone: 905-264-3660
Email: info@nutranorth.com

NutraNorth

CERTIFICATE OF ANALYSIS

Manufactured for	**MACKISEN**				
Name of product:	**Vitamin K2**			**NPN**	**80133278**
Packaging Lot # :	**M2500536/2**	**Master Packaging Record #**		**Expiry Date :**	**08/2028**
		MPR	**MA-N278-120-V0**		
Manufacturing Lot # :	**M2500536**	**Master Manufacturing Record #:**		**MFG Date:**	**09/2025**
		MMR	**MA-N278-V0**		
Storage Conditions:	Store at room temperature (R.T), in closed dry containers and Keep away from high temperature & moisture.				
Physical Description:	White 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:

			Specifications				
TESTES	**Results**		**Low**	**Target**	**High**	**Strength**	**Method**
Average Wt. of Capsules	315		288	320	352	mg	USP <2091>
Wt. variation of Capsules	Complies		Conforms as per USP weight variation +/- 10 %				USP <2091>
Odour & Taste	Complies		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**
Vitamin K2 (Menaquinone 7)	126.15	mcg	108.00	120.00	192.00	mcg	JPL-020.05 (HPLC)
NON-MEDICINAL INGREDIENTS	Empty Clear Vegetable Capsule Size "2"						

Purity:

MICRO:	**Results**	**Limits**	**Method**
Total Plate Count	80 c.f.u / g	< 3,000 c.f.u / g	USP <2021/2022>
Total Yeast	<10 c.f.u / g	< 300 c.f.u / g	USP <2021/2022>
Total Mold	<10 c.f.u / g	< 300 c.f.u / g	USP <2021/2022>
E.Coli	Not Detected	Not Detected	USP <2021/2022>
Salmonella Spp	Not Detected	Not Detected	USP <2021/2022>
Staphylococcus Aureus	Not Detected	Not Detected	USP <2021/2022>
HEAVY METALS:	**Results**	**Limits -1 capsule /day**	**Method**
Arsenic	<0.0003 mcg / kg b.w./day	< 0.14 mcg / kg b.w./day	ICP-MS
Cadmium	0.0002 mcg / kg b.w./day	< 0.09 mcg / kg b.w./day	ICP-MS
Lead	0.0042 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

Prepared by: Neelima Dec/02/2025

Approved by: Bhargava Dec/02/2025

Quality Assurance

This report is submitted for the exclusive use of the person(s), partnership(s), or corporation(s) to whom it is addressed. Neither the report, name NutraNorth Inc., nor its staff may be used in conjunction with the advertising, or sale of any product or process without written consent. This information is the exclusive property of NutraNorth Inc. and may not be reproduced in whole or part without exclusive written authorization.

F.75-R1-P1 -07/2016

NutraNorth
1330 Fewster Dr, Mississauga
ON,L4W 1A4, Canada
Phone: 905-264-3660
Email: info@nutranorth.com