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## Thorvin for Animals – Specifications

### Certified 100% Organic

#### PRODUCT DESCRIPTION

<b>Species</b>	<i>Ascophyllum nodosum</i>
<b>Plant Part</b>	Milled Sea Vegetation (whole thallus)
<b>Processing Method</b>	Sustainable harvest, controlled geothermal low-temperature drying
<b>Primary Active</b>	Phytonutrients, Iodine and other micronutrients
<b>Particle Size</b>	Granules and powder
<b>Color</b>	Green
<b>Aroma</b>	Mild marine odor
<b>Taste</b>	Salty
<b>Storage</b>	Dry area
<b>Shelf Life</b>	Best used within 36-months
<b>Packaging</b>	50 or 55-lb. Kraft bag, or in bulk tote
<b>Certificates</b>	Certified 100% Organic by QAI

#### ANALYSIS

Activity	600 – 1200 ppm (0.06 – 0.12%) Iodine		Test Methods
<b>Moisture</b>	NMT 10%		
<b>Ash</b>	NMT 45%		
<b>Lead</b>	NMT 5 ppm		ICP-MS
<b>Inorganic Arsenic</b>	NMT 1 ppm		IC-ICP-MS
<b>Cadmium</b>	NMT 2.0 ppm		ICP-MS
<b>Mercury</b>	NMT 0.05 ppm		ICP-MS
<b>Microbial</b>	Aerobic Plate Count	<100,000 CFU/g	FDA BAM 3
	Total Coliform	<1,000 CFU/g	CMMEF 8.7
	E. coli	N/D (<3 CFU/g)	BAM 4
	Salmonella	Negative (ND/50g)	AOAC-RI960801
	Yeast/Mold	<5,000 CFU/g	CMMEF 20.5

Thorvin contains over 60 minerals, vitamins, amino acids, and beneficial phytonutrients.

Thorvin is a 100% natural organic marine algae product; therefore, a specific laboratory analysis may vary from the typical analysis due to naturally occurring fluctuations in the seaplant. The information presented above is believed to be accurate and reliable; however, Thorvin, Inc. makes no warranty, either express or implied, and assumes no liability for this information and the product described herein. These are averages and are not guaranteed as conditions of sale.

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# Thorvin for Animals – Typical Analysis

## General (Average %)

Moisture	9.0
Protein	8.5
Crude Fiber	4.0
Total Ash (minerals)	29.0
Fat	2.0
Carbohydrates (Nitrogen-free extracts)	47.5
<i>Total</i>	100.0

## Macronutrients (%)

Ca	Calcium	2.1
Cl	Chlorine	6.5
K	Potassium	2.7
Mg	Magnesium	0.85
N	Nitrogen	1.4
Na	Sodium	4.0
P	Phosphorus	0.3
S	Sulfur	2.8

## Micronutrients (PPM)

Al	Aluminum	289
B	Boron	98
Co	Cobalt	4
Cr	Chromium	0.8
Cu	Copper	4
Fe	Iron	622
I	Iodine	780
Mn	Manganese	60
Mo	Molybdenum	2
Se	Selenium	0.5
Sn	Tin	6.5
Zn	Zinc	12

## VITAMINS

A	Retinol	390 ppb
B <sub>2</sub>	Riboflavin	4.9 ppm
B <sub>3</sub>	Niacin	182.6 ppm
C	Ascorbic Acid	375 ppm
D	Cholcalciferol	150 ppb
E	Alpha-tocopherol	110 ppm

## AMINO ACIDS (% OF TOTAL AMINO ACIDS)

Alanine	5.52	Lysine	4.24
Arginine	5.47	Methionine	1.07
Aspartic Acid	9.88	Phenylalanine	3.54
Cystine	1.49	Proline	3.71
Glycine	5.70	Serine	4.92
Glutamic Acid	12.03	Threonine	4.60
Histidine	1.29	Tryptophan	1.68
Isoleucine	3.26	Tyrosine	3.52
Leucine	5.63	Valine	3.51

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Ingredients: Dried Kelp\* (*Ascophyllum nodosum*)

\*USDA Certified 100% Organic

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