

KELP MEAL

Neptune's Harvest *Ascophyllum nodosum* Kelp Meal products are a natural and cost effective enhancement to any soil fertilization and conditioning program. It is suitable for all crops and applications, and can be mixed with most soil conditioners and fertilizers. It can also be incorporated into potting soils, seed and transplant beds, as well as composting material.

For use on agronomic crops and gardens, apply in early spring as soon as soil can be worked. For perennial crops, apply at the end of dormancy. Mix thoroughly with the soil or growing media, taking care not to apply in concentrated form directly to the roots. To apply as a soil conditioner for fruit groves, ornamental trees, lawns and turf, apply directly as a top dressing.

The following application rates are approximate and may vary depending on climatic conditions, soil type and soil fertility.

FIELD CROPS:

200–400 lbs. per acre; 225–450 kg. per hectare

ROW CROPS:

2 lbs. per 100 feet; 1.5 kg. per 50 meters

VEGETABLE & FLOWER GARDENS:

3 lbs. per 100 sq. feet; 1.5 kg per 10 sq. meters

TREES & FLOWER GARDENS:

1 lb. per inch of tree diameter; 200 g. per cm. of tree diameter

TURF GRASSES & LAWNS:

10 lbs. per 1000 sq. feet; 5 kg. per 100 sq. meters

Typical Analysis

ORGANIC MATTER
ASH (MINERALS)
MOISTURE

66.0%

22.0%

12.0%

100.0%

MINERALS

TOTAL NITROGEN (N)

0.6–2.0%

AVAILABLE PHOSPHORIC ACID (P₂O₅)

0.3–0.9%

SOLUBLE POTASH (K₂O)

2.5–3.7%

ALUMINUM (Al)

20–100 ppm (mg/kg)

ARSENIC (As)

<3 ppm (mg/kg)

BARIUM (Ba)

15–50 ppm (mg/kg)

BERYLLIUM (Be)

<1 ppm (mg/kg)

BORON (B)

80–100 ppm (mg/kg)

CADMIUM (Cd)

<1 ppm (mg/kg)

CALCIUM (Ca)

1.0–3.0%

CHLORINE (Cl)

1.0–3.0%

CHROMIUM (Cr)

<1 ppm (mg/kg)

Kelp Meal Typical Analysis (continued)

COBALT (Co)	1-10 ppm (mg/kg)
COPPER (Cu)	4-15 ppm (mg/kg)
IODINE (I)	0.05-0.08%
IRON (Fe)	0.015-0.10%
LEAD (Pb)	<1 ppm (mg/kg)
MAGNESIUM (Mg)	0.5-1.0%
MANGANESE (Mn)	0-5 ppm (mg/kg)
MOLYBDENUM (Mo)	<1 ppm (mg/kg)
NICKEL (Ni)	1-5 ppm (mg/kg)
SELENIUM (Se)	3-4 ppm (mg/kg)
SODIUM (Na)	2.4-4.0%
STRONTIUM (Sr)	100-200 ppm (mg/kg)
SULPHUR (S)	2.0-2.3%
TIN (Sn)	<10 ppm (mg/kg)
TITANIUM (Ti)	3-6 ppm
VANADIUM (V)	2-5 ppm (mg/kg)
ZINC (Zn)	35-100 ppm (mg/kg)

pH

6.0

CARBOHYDRATES

ALGINIC ACID	18.0-27.0%
MANNITOL	3.0-8.0%
LAMINARIN	2.0-5.0%
OTHER CARBOHYDRATES	20.0-22.0%

AMINO ACID CONTENT (EXPRESSED AS GRAMS OF AMINO ACID NITROGEN PER 100 G OF PROTEIN)

ALANINE	5.3
ARGININE	8.0
ASPARTIC ACID	6.9
CYSTINE	trace
GLYCINE	5.0
GLUTAMIC ACID	10.0
HISTIDINE	1.3
ISOLEUCINE	2.8
LEUCINE	4.6
LYSINE	4.9
METHIONINE	0.7
PHENYLALANINE	2.3
PROLINE	2.6
SERINE	3.0
THREONINE	2.8
TRYPTOPHAN	trace
TYROSINE	0.9
VALINE	3.7

Neptune's Harvest Kelp Meal is produced from 100% pure *Ascophyllum Nodosum*, hence its composition may vary due to natural variations in live seaweed.

Available in 50 lb. bags.