OCEAN NUTRITION™

Preserving Life and Beauty through Nutrition

COPEPODS

- High quality, flash-frozen Copepods for use in fish hatcheries
- A co-feeding diet for the last (enriched) Artemia and early weaning phases
- A highly digestible source of protein and essential nutrients (such as DHA, EPA, ARA, astaxanthin, ...) for superior larval performance
- A high DHA/EPA ratio
- Significantly reduces labor intensive procedures and costs related to live food production and enrichment
- Results in fast growing larvae with improved survival rate and pigmentation
- Excellent buoyancy
- Biosecurity guaranteed
- Size Copepods:
    - 0,5 - 0,8 mm
    - 0,7 - 1,3 mm
    - 1,2 - 1,8 mm

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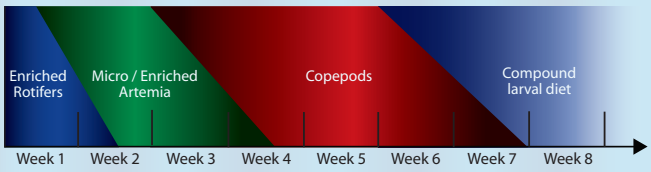
INSTRUCTIONS FOR USE

The use of Ocean Nutrition's Copepods can easily be implemented into existing feeding protocols.

Copepods can replace up to 50% of Artemia nauplii in larval fish production.

It is advised to rinse the defrosted Copepods gently with cold water in a sieve of 210 micron.

Feeding Regime Example



INGREDIENTS

Ingredients: 100% pure copepods

GUARANTEED ANALYSIS ON DRY WEIGHT

Crude protein	min. 68,0 %
Total fat (after hydrolysis)	min. 16,6 %
Crude ash	max. 5,0 %
Crude fibre	max. 11,1 %
Docosahexaenoic Acid (DHA)	min. 14 mg/gr
Eicosapentaenoic Acid (EPA)	min. 8 mg/gr
Arachidonic Acid (ARA)	min. 1 mg/gr
DHA / EPA	min. 1,75

Moisture:	max. 91,0 %

SELECTION AND HARVESTING

The copepods are cultured in natural ponds, harvested in early spring and nutritionally screened before further processing.

COMPARISON OF TYPICAL ANALYSIS ON DRY WEIGHT

Compared to Artemia nauplii, copepods have a higher protein and lipid content and are high in astaxanthin, DHA, EPA and ARA.

Copepod showing oil droplets, naturally rich in astaxanthin

Parameter	Artemia nauplii	Copepods	Enriched Artemia nauplii
Crude protein	54,3 %	69,8 %	53,4 %
Total fat	14,2 %	18,7 %	19,6 %
ARA (20:4ω6)	1,5 mg/gr	5,2 mg/gr	2,7 mg/gr
DHA (22:6ω3)	0	22,4 mg/gr	15,2 mg/gr
EPA (20:5ω3)	12,1 mg/gr	11,9 mg/gr	14,8 mg/gr
DHA/EPA Ratio	0	1,9	1,03
Astaxanthin	0	323 ppm	0
Canthaxanthin	308 ppm	0	298 ppm
Size animals	550-600 µm	500-800 µm	600-800 µm
Amount of animals per kg	+/- 50 million	+/- 35 million	+/- 45 million

MICROBIOLOGICAL ANALYSIS

Parameter	Results	Analysis method
Total Plate Count	< 10 CFU/g	FDA BAM Online, 2001 (chapter 3)
Enterobacteriaceae	< 10 CFU/g	ISO 21528-2 : 2004
Salmonella sp.	Absent (per 25g)	ISO 6579 : 2002/Amd. 1:2007
Vibrio sp.	Absent (per 25g)	FDA BAM Online, 2004 (chapter 9)

PACKAGING & STORAGE

Packaging: flatpacks of 1kg

Sizes Copepods:
- 0,5 - 0,8 mm
- 0,7 - 1,3 mm
- 1,2 - 1,8 mm

Storage:
Keep frozen at - 18°C

Ocean Nutrition Europe • Rijkmakerlaan 15 • 2910 Essen - Belgium • Tel: +32 3 677 02 10 • info@oceannutrition.eu

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