

TECHNICAL DATA SHEET: FISH OIL (AQUACULTURE GRADE)

1. NUTRITIONAL & BASIC PROFILE

- Crude Protein: 0% (Pure Lipid source)
- Crude Fat (Total Lipids): Min 99.0%
- Moisture & Impurities (M&I): Max 1.0%
- Ash: 0%
- Metabolizable Energy (ME): ~8,900 kcal/kg
- Digestibility: Min 95% (for Salmonids and Marine fish)

2. CHEMICAL & QUALITY SPECIFICATIONS

- Free Fatty Acids (FFA): Max 3.0% (as Oleic)
- Peroxide Value (PV): Max 5.0 meq \$O_2/kg\$ (at loading)
- Anisidine Value (AV): Max 20.0
- TOTOX Value: Max 30.0 (Calculated as $2 \times PV + AV$)
- Saponification Value: 180 – 200 mg KOH/g
- Iodine Value (Wijs): 150 – 185 g \$I_2/100g\$
- Unsaponifiable Matter: Max 2.0%

3. OMEGA-3 FATTY ACID COMPOSITION (TYPICAL)

- EPA (Eicosapentaenoic Acid): 10.0% – 18.0%
- DHA (Docosahexaenoic Acid): 6.0% – 12.0%
- Total Omega-3 (n-3 PUFA): Min 18.0% – 25.0%

4. SAFETY & CONTAMINANTS (EU DIRECTIVE 2002/32/EC)

- Dioxins (PCDD/F): Max 5.0 ng/kg (WHO-TEQ)
- Dioxin-like PCBs: Max 20.0 ng/kg
- Heavy Metals: Arsenic (As) < 2.0 mg/kg | Mercury (Hg) < 0.1 mg/kg | Lead (Pb) < 0.1 mg/kg
- Antioxidants: BHT / Ethoxyquin-free or Natural Tocopherols (as per contract)

5. LOGISTICS & STORAGE

- Appearance: Clear, brownish-gold liquid oil.
- Storage: Bulk in stainless steel or coated tanks. Nitrogen blanket recommended.
- Shelf Life: 12 months in optimal cool and dry conditions.
- Transport: Compliant with FOSFA/EU regulations for feed-grade materials.

6. DECLARATION OF COMPLIANCE Produced from sustainable marine sources. This oil is a high-energy ingredient rich in essential fatty acids, ideal for premium aquafeed production.