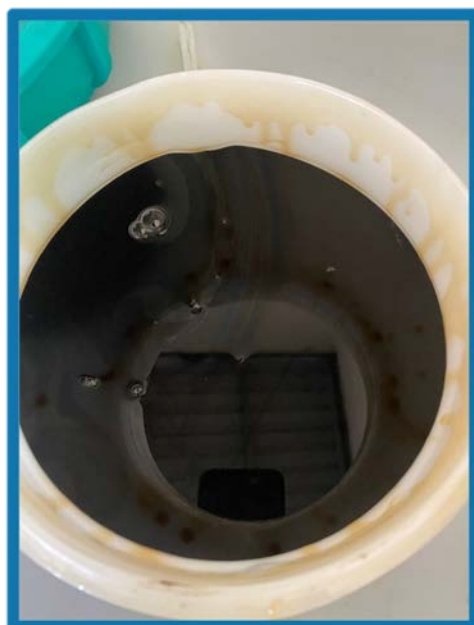
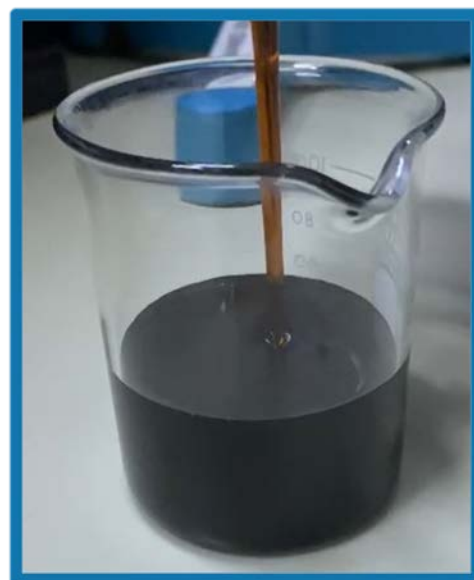


Offer Sheet

Product	Crude fish oil for animal feed supplement
Quantity	Approximately 5,800 gallons per tank Flexitank 19-ton per 20ft container 3-6 containers per month availability
Condition	Fresh upon order, not expired or surplus
Net weight	48,500 lbs. per container
Availability	Ongoing or spot shipment
Location	Memphis and Florida
Date	12/9/25
COA	Attached below



Brian Svrusis
Solvent Systems International
575 Bennett Road
Elk Grove Village, IL 60007
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Click here for: [Surplus Inventory](#)

1. Animal Feed Ingredient

One of the largest markets globally.

Crude fish oil is used as a **high-energy, omega-rich feed fat** in:

- aquaculture feeds (salmon, trout, marine species)
- poultry feed
- swine feed
- specialty livestock nutrition

Benefits include:

- omega-3 content
 - digestibility
 - energy density
 - growth performance
 - improved feed conversion ratios
-

2. Aquaculture and Fish Hatcheries

Used in:

- starter feeds
- broodstock diets
- larval diets
- marine species feed formulation

In many cases it's the most cost-efficient lipid source for marine organisms.

3. Biodiesel Feedstock

Crude fish oil is used as a **renewable feedstock for biodiesel production**.

Highly suitable because:

- triglyceride content converts directly to methyl esters
 - lower feedstock cost vs refined oils
 - strong lifecycle carbon reduction
 - growing interest in waste-based biodiesel
-

4. Industrial Lubricants and Greases

Used as a natural base oil or additive in:

- metalworking fluids
- release agents
- rust-preventive formulations
- industrial greases

Provides biodegradability and high lubricity.

5. Leather Processing

Used in leather finishing and tanning as a natural fatliquor:

- softens leather
 - improves flexibility
 - penetrates fibers better than plant oils
 - long-standing industrial application
-

6. Chemical Intermediate

Crude fish oil is a starting material for production of:

- omega-3 concentrates
 - EPA/DHA derivatives
 - fatty acid esters
 - alkyd resins
 - specialty lubricants
 - surfactants
-

7. Soap and Surfactant Manufacturing

Fish oil fatty acids are used in:

- industrial soaps
 - specialty cleaning products
 - degreasing formulations
 - surfactant intermediates
-

8. Fertilizer and Agricultural Inputs

Used as a nutrient source in:

- organic fertilizers
 - plant micronutrient blends
 - soil conditioners
 - marine-derived organic amendments
-

1. PRODUCT : Crude Fish Oil (Crude Tuna Fish Oil)
2. TYPE OF PRODUCT : Natural Crude Tuna Fish Oil
3. ORIGIN : Indonesia
4. CAS NUMBER : **8016-13-5** (Fish Oil, general CAS for crude fish oils)
5. SCOPE : This document provides the specifications, analytical parameters, and laboratory results for Crude Tuna Fish Oil supplied by PT Adi Alam Segar. All analytical results are based on SGS laboratory testing following validated international methods.
6. DESCRIPTION : Crude Tuna Fish Oil is a natural oil extracted from tuna by-products. It has a characteristic fish odor and appearance and is used as a raw material for further refining, animal feed applications, aquaculture feed, and industrial processing.
7. COMPOSITION :
 - 100% Crude Tuna Fish Oil
 - Derived from tuna fish raw materials
 - Free from additives and preservatives
8. CHARACTERISTICS

PHYSICAL

Appearance : Oily liquid
 Color : Characteristic fish oil (as-is)
 Odor : Typical fish oil odor

CHEMICAL (SGS Laboratory Results)

Peroxide Value	: 4.65 meq/kg	AOCS Cd 8b-90:2017
Moisture & Volatile Matter	: 0.16%	AOCS Ca 2c-25:2017
FFA (as Palmitic Acid)	: 3.10%	AOCS Ca 5a-40
FFA (as Lauric Acid)	: 2.42%	AOCS Ca 5a-40
FFA (as Stearic Acid)	: 3.02%	AOCS Ca 5a-40
FFA (as Myristic Acid)	: 2.76%	AOCS Ca 5a-40
FFA (as Oleic Acid)	: 3.42%	AOCS Ca 5a-40
FFA (as Arachidic Acid)	: 3.79%	AOCS Ca 5a-40
Acid Value	: 6.87 mg KOH/g	AOCS Cd 3d-63:2017
p-Anisidine Value	: 156.55	AOCS Cd 18-90:2017
Iodine Value	: 155.04 g I ₂ /100g	AOCS Cd 1b-87:2017

Fatty Acid Profile (GC-FID)

DHA (C22:6)	: 28.24%	GC-FID (SGS method)
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Founder & Chief executive officer



Manager Production



Quality Assurance



EPA (C20:5) : 5.81%

GC-FID (SGS method)

9. PACKING* :
 - Steel drum: 190–200 kg net
 - Flexitank option available
 - Flrxibag 22ton 20ft
10. USAGES :
 - Refining into edible fish oil
 - Animal feed ingredient
 - Aquaculture feed formula
 - Nutraceutical intermediate
 - Industrial applications (lubricants, coatings, biodiesel, etc.)
11. SHIPPING / STORAGE
 - Store in a cool, dry place
 - Keep away from direct sunlight
 - Recommended storage temperature: **below 25°C**
 - Keep container tightly closed to prevent oxidation
 - Shelf life varies based on storage conditions (typically 12 months)

12. PICTURE



13. ADDITIONAL INFORMATION

- **Batch Number:** -----
- **Production Date:** -----
- **Expiry Date:** -----
- **Certifications:** COA (Certificate of Analysis), MSDS (Material Safety Data Sheet), Certificate of Origin, Fumigation Certificate (if required), and other export documents as requested.
- **Method of Analysis:**

Founder & Chief executive officer ⓘ



Manager Production



Quality Assurance



Company Name **PT ADI ALAM SEGAR**

© Doc Code | 003-AAS-ps-25

Document Name **Product Specification Crude Tuna Fish Oil**

All analytical testing was conducted by **SGS Indonesia**, an ISO/IEC 17025 accredited laboratory, using the following internationally recognized methods:

- **Peroxide Value:** AOCS Cd 8b-90:2017
- **Moisture & Volatile Matter:** AOCS Ca 2c-25:2017
- **Free Fatty Acids (as Palmitic, Lauric, Stearic, Oleic, Arachidic):** AOCS Ca 5a-40
- **Acid Value:** AOCS Cd 3d-63:2017
- **p-Anisidine Value:** AOCS Cd 18-90:2017
- **Iodine Value:** AOCS Cd 1b-87:2017
- **Fatty Acid Profile (EPA/DHA):** GC-FID (SGS Method SO-(ID)-[H&N]AN-069)
- All testing performed following **Good Laboratory Practices (GLP)** and **ISO/IEC 17025** standards.
- **Compliance:**

This product complies with applicable Indonesian and international quality and safety requirements for **crude fish oil**, including:

 - AOCS (American Oil Chemists' Society) Official Methods for oil and fat analysis
 - SGS ISO/IEC 17025 accredited laboratory standards
 - General food/raw material safety principles for animal feed, aquaculture feed, and industrial oil processing
 - Meets export requirements for crude marine oils when stored and handled correctly
- **Special remarks:**
 - The analytical values reported in this COA are based on the SGS laboratory test results of the submitted sample and represent typical characteristics of the lot.
 - Crude tuna fish oil is a natural product, and variations may occur depending on raw material conditions, seasonal factors, and handling.
 - This COA does not guarantee suitability for specific industrial or nutritional applications unless further refined.
 - Buyers are responsible for confirming compliance with their destination country's regulations and verifying suitability for their intended end-use.
- **Contact Information:**

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