

FISHMEAL

TECHNICAL DATASHEET



PRODUCT NAME
FISHMEAL



PRODUCT CODE
PMO-FISHMEAL



PRODUCT LIST
GMP+ 10.002



VERSION
01



1. PRODUCT DESCRIPTION

Fishmeal is a high quality protein product produced mainly from Sardine and Herring. The raw material is cooked, pressed, dried, cooled, milled and packed under strict quality controls.

Fishmeal has a characteristic color and odor of the raw material and a shelf life of 18 months under normal storage conditions (protected from the environment) with valid analysis.

It is suitable for animal feed in poultry, aquaculture, swine, livestock and other animal nutrition applications.

Shipping classification:

- IMO CLASS: Class 9
- UN NUMBER: UN 2216
- PACKING GROUP: III



2. PRESERVATION METHOD

Mixed thermal treatment by conduction and convection:

- Steam drying (first and second drying stages)
- Hot air drying (third drying stage)



3. STORAGE CONDITIONS

- Store at ambient temperature.
- In a dry, clean, ventilated and disinfected warehouse with roof.
- Restricted access to unauthorized personnel.
- Stacked on wooden pallets, protected with plastic wrapping.



4. SHELF LIFE

18 months from production date under normal storage conditions.



5. PACKAGING

Fishmeal is packed in laminated polypropylene bags, white color, printed with company logo. Approximate bag size: 71 x 109 cm. Approximate net weight: 50 kg per bag. Bags are stacked on wooden pallets (25 bags per pallet) and wrapped with plastic for protection. Bag useful life: 3 years under good storage conditions. Bags are printed with: product type, approximate weight, logo and manufacturer contact (email).



6. CHEMICAL COMPOSITION

Component	Specification
Moisture	Max 10%
Crude Protein (N x 6.25)	56 – 68%
Crude Fat	Max 10%
Ash	Max 23%
Salt (NaCl)	Max 3%
Sand	Max 2%
TVN (Total Volatile Nitrogen)	Max 250 mg/100 g
Histamine	Max 1000 ppm



7. MICROBIOLOGICAL STANDARDS

Microorganism	Maximum Limits
Salmonella	Absent in 25 g
Shigella	Absent in 25 g
Enterobacteriaceae	n = 5, c = 2, m = 10, M = 300 UFC/g
Fungal Count	Max 10,000 UFC/g (*)
Total Bacteria Count	Max 2,000,000 UFC/g (*)

(*) Source: GMP+ TS 1.5 Feed Safety Limits. Source: Supplier Statement.



8. AMINO ACID PROFILE (Typical % on Dry Matter Basis)

Amino Acid	Percentage (%)
Lysine	5.0 – 6.5
Methionine	2.0 – 2.8
Threonine	3.3 – 4.5
Tryptophan	0.6 – 0.9
Valine	4.0 – 5.5
Leucine	7.5 – 9.5
Isoleucine	4.0 – 5.5
Phenylalanine	4.0 – 5.5



Values may vary depending on raw material, season and processing conditions.



9. APPLICATIONS



Poultry Feed



Aquaculture Feed



Swine Feed



Livestock Feed

