



Service Specification – Fish & Aquaculture

Fish and seafood are very popular with consumers because of their valuable ingredients. But they are also among the most perishable foods. In addition to nutritional analyses and microbiology, the analysis of residue and contaminants as well as authenticity and provenance play a special role for this product group.

With its global network of state-of-the-art laboratories and competence centres, Eurofins offers a complete range of analytical services to ensure the quality, safety and authenticity of fish & fish products, seafood and aquaculture products.

The following analyses are an extract from the Eurofins portfolio, especially for fish & fish products, seafood and aquaculture products. Further parameters are available on request.

Special Analysis for your Industry

- Histamine
- Total volatile basic nitrogen (TVB-N)
- Indole
- Carbon monoxide treatment
- Nematodes
- Panade, glaze portion
- Animal species determination
 - Exclusion of vertebrate constituents (e.g. ruminants) in fish feed
 - Identification of fish species
- Analysis of halal foods

Inorganic Contaminants

- Heavy metals: e.g. lead, cadmium, mercury, arsenic (incl. differentiation between total and inorganic arsenic)
- Radioactivity/radionuclides: caesium-134 and caesium-137, iodine-131 (further radionuclides on request)

Organic Contaminants

- Polychlorinated biphenyls (PCB) (non-dioxin-like, 209 congeners)
- Dioxins
- Brominated flame retardants (e.g. PBDE, PBB, HBCDD, TBBPA)
- Perfluorinated surfactants (PFT)
- Polycyclic aromatic hydrocarbons (PAH) (e.g. benzo[a]pyrene, PAH4)
- Plasticizers (e.g. phthalates)
- Mineral oil hydrocarbons (MOSH, MOAH)

Veterinary Drug Residues and Metabolites

- More than 250 substances
- Antibiotics
 - Chloramphenicol
 - Nitrofurantol metabolites
- Antiparasitics
 - Triphenylmethane
- Animal drug screening/multimethods
- Inhibitor tests

Microorganisms and Hygiene

- Hygiene germs
- Total plate count
- Yeasts, moulds
- Pathogenic germs and their toxins
- Salmonella
- Listeria
- Indicator organisms (e.g. enterobacteria, coliform germs, *E.coli*)

Ingredients

- Nutrients (e.g. Big 8)
 - Fat
 - Protein
 - Carbohydrates
 - Water
 - Sodium/cooking salt
- Valuable ingredients
 - Omega-3 fatty acids
- Minerals
 - Essential trace elements
 - Iodine (I)
- Additives
 - Polyphosphates (E450c)
 - Preservatives
- Sensory characteristics

Pesticides

- Insecticides
 - Organochlorine pesticides
 - Organophosphorus pesticides
 - Toxaphene
- Herbicides
- Ethoxyquin, ethoxyquin dimer

Further Analyses

- Genetically modified organisms (GMOs)
 - Screening, identification and quantification of GMO constituents
- Authenticity and provenance
- Sensory analysis

Advice and further Services

- Food regulatory advice
- Declaration of conformity according to applicable EU as well as international laws
- Sampling
- Implementation of hygiene and quality audits
- Implementation of hygienic training

With the industry laboratory for fish & fish products, seafood and aquaculture, Eurofins is your competent partner for the analysis and evaluation of this product group.