



Monitoring and Analysis of Microplastics

DETECTION AND QUANTIFICATION IN AQUATIC ENVIRONMENTAL MATRICES (ABIOTIC AND BIOTIC)

KEY WORDS

MICROPLASTICS,
IMPACT,
ENVIRONMENTAL
MATRICES

DESCRIPTION

Comprehensive service for the analysis and assessment of microplastic pollution in aquatic ecosystems. This service includes sampling, extraction, and characterization of plastic particles in abiotic matrices (surface water, water column, bottom and beach sediments) and biotic matrices (analysis of stomach contents and tissues in fish and benthic macroinvertebrates). This approach allows for the determination of the abundance, distribution, and types of microplastics, evaluating their impact and the environmental quality of the water body, for environmental baseline studies, environmental impact assessments, and regulatory compliance.

AVAILABLE TECHNIQUES AND/OR EQUIPMENT

- Sampling with nets and corer for sediments
- Digestion of organic matter (chemical and enzymatic protocols)
- High-resolution stereoscopic microscopy for visual counting and classification

APPLICATIONS

- Diagnosis of water quality in hydrological basins
- Environmental Baseline Studies for Projects
- Efficiency monitoring in wastewater treatment plants
- Ecological risk assessment in aquatic fauna

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