

ISO 24187:2023-09 (E)

Principles for the analysis of microplastics present in the environment

Contents	Page
Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 General aspects.....	2
5 General requirements for all analytical steps.....	2
6 Identification of appropriate detection methods.....	3
6.1 General.....	3
6.2 Detection techniques.....	4
6.3 Identification of objective to be addressed.....	4
7 Sampling of water.....	5
7.1 General.....	5
7.2 Sample volume.....	5
7.3 Mesh sizes.....	6
7.4 Filter materials.....	6
8 Sampling of terrestrial, semiterrestrial and subhydric soils.....	6
8.1 General.....	6
8.2 Sampling of terrestrial soils.....	6
8.3 Sampling of semiterrestrial soils.....	7
8.4 Sampling of subhydric soils (sediments).....	7
9 Sampling of air.....	7
9.1 Indoor air.....	7
9.2 Outdoor air.....	7
10 Sampling of sludges and other similar materials.....	7
11 Sampling of mineral and other inorganic materials.....	8
12 Sampling of biota.....	8
13 Sample preparation.....	8
13.1 General aspects.....	8
13.2 Drying.....	9
13.3 Milling and grinding.....	9
13.4 Removal of inorganic matter.....	9
13.5 Removal of organic matter.....	9
14 Data processing.....	10
14.1 General aspects.....	10
14.2 Single spectra/chromatogram interpretation.....	10
14.3 Interpretation of large spectra/chromatogram data sets.....	10
15 Aspects of analytical quality assurance.....	11
15.1 Reference materials.....	11
15.2 Performance of interlaboratory comparison tests.....	12
Annex A (informative) Advanced Data Processing.....	14
Bibliography.....	20