



# MICROPLASTIC OFFERING

Accredited analysis for several matrices and polymer types with both techniques

## μFTIR

- 10–1000 μm size range
- Polymer type
- Particle number
- Particle size
- Shape (fiber, fragment)

## FTIR-ATR

- 1000–5000 μm size range
- Polymer type
- Particle number

## PYR-GCMS

- 1–1000 μm size range
- Polymer type
- Total polymer mass

## MATRICES ANALYSED



### Water samples

drinking water, bottled water, ground-water, surface water, treated wastewater, process water, raw wastewater



### Solid samples

soil, sludge, sand, sediment, compost



### Air

indoor, environmental, workplace



### Cosmetics\*



### Food\*

salt, honey, soft drinks, milk

\*not accredited

## POLYMERS ANALYSED

Polymer types analysed	FTIR	PYR-GCMS
PE   Polyethylene	•	•
PP   Polypropylene	•	•
PET   Poly(ethylene-terephthalate)	•	•
PA   Polyamide	•	•
PMMA   Poly(methyl methacrylate)	•	•
PVC   Poly(vinyl-chloride)	•	•
PU   Polyurethane	•	
PS   Polystyrene	•	•
PC   Polycarbonate	•	•
POM   Polyoximethylene	•	
PLA   Polylactic acid	•	
ABS   Acrylonitrile-butadiene-styrol		•
PIP   Polyisoprene (natural rubber)		•
BR+SBR   Butadiene rubber + styrol-butadiene rubber		•
Other polymers on request*	•	•



TEST CODES	Sample prep.*	Analysis			
		FTIR 50-1000 µm	FTIR 10-1000 µm	FTIR-ATR 1000-5000 µm	PYR 10-1000 µm
Prepared samples directly for analysis	-	Z1MPW	Z1MPX	Z1MPY	Z1MPZ
Water (with very low susp. solid content), drinking water, bottled water, groundwater, soft drinks	Z1MP1	Z1MPA	Z1MPF	Z1MPK	Z1MPQ
Water (with medium susp. solid content), surface water, treated wastewater, process water	Z1MP2	Z1MPB	Z1MPG	Z1MPL	Z1MPR
Water (with high susp. solid content), raw wastewater	Z1MP3	Z1MPC	Z1MPH	Z1MPM	Z1MPS
Solid samples, soil, sludge, sand, sediment, compost	Z1MP4	Z1MPD	Z1MPI	Z1MPN	Z1MPT
Air (indoor, environmental, workplace)	Z1MP5	Z1MPE	Z1MPJ	Z1MPP	Z1MPV

\*sample preparation appears as a mandatory prerequisite test for tests Z1MPA-Z1MPV

REPORTING LIMIT	Sample prep.*	Analysis			
		FTIR 50-1000 µm	FTIR 10-1000 µm	FTIR-ATR 1000-5000 µm	PYR 10-1000 µm
Prepared samples directly for analysis; air samples	-	5 particles/sample	5 particles/sample	n.a.	1 ug/sample
Water samples	n.a.	5 particles/L	5 particles/L	n.a.	1 ug/L
Solid samples, soil, sludge, sand, sediment, compost	n.a.	1,25 particles/g d.m.	1,25 particles/g d.m.	n.a.	0,25 mg/kg

## SAMPLE CONTAINERS AND NECESSARY SAMPLE VOLUME/MASS

Water samples	2x1 L in glass jars, covered with aluminium foil under the plastic lid
Solid samples	200 g in glass jars, covered with aluminium foil under the plastic lid
Air (indoor, environmental, workplace)	Sample in glass container, covered with aluminium foil under the plastic lid (as per air sampling method, e.g. on filter or liquid suspension)
Prepared samples directly for analysis	as per result of sample preparation (e.g. small volume vials, filters in glass Petri-dishes)
Consumer products	3-5 individual packed product per sample

General turnaround time is 4 weeks