Table S1: Beach contamination by microplastics along the Mediterranean basin. Termoplastic Polyurethane (TPU), Polyestradiol Phosphate (PEP), Polyesther (PES), Polyacrylonitrile (PAN), Alkid resin (AL), Polyvinyl Alcohol (PVOH), Synthet Cellulose (SC), Butyl Branham (BB), Ethylene Propylene (EPR), Cellulose Triacetate (CTA), Styrene Acrylonitrile (copolymer) (SAN), Epoxy Polyester (EPP), Expanded Polystirene (EPS), Polypropylene Atactic (PP-at), Poly Vinyldene Chloride (PVCD), Ethylene Propylene Dien Monomen (EPDM), Polyethylene (PE), Polypropylene (PP9, Polystirene (PS), Poly Vinyl Chloride (PVC),Ethylene Vinyl Acetate (EVA),High Densi-ty Polyethylene (HDPE), Low Density Polyethylene (LDPE), Linear Low Density Polyethylene (LLDPE), Poly Ethylene Terephtalate (PET), Poly Ethylene Vinyl Acetate (PEVA), Polyamide (PA), isotactic Propylene (iPP), syndiotactic Propylene (sPP), Poly Tetra Fluoro Ethylene (PTFE), syndiotactic Polystirene (sPS), Poly Vynil Alcohol (PVA), Phenol Formaldehyde (PF), Polyurethane (PU), Acrylonitrile butadiene styrene (ABS), Styrene-Butadiene-Styrene Copolymer (SBS).

GSAs	Extraction process	N items/kg	Polymers	Identification method	References
17	Visual sorting	12.1	PE, PP, Nylon, PS, PET, PVC, TPU	FT-IR	[71]
17	Density separation modified	672 – 2175	PE, PP, PEP, PES, PS, PAN, AL, PVC, PVOH, Nylon	µFT-IR	[76]
12	Density separation	141.20 – 461.25	PE PP	FTIR-ATR	[61]
7	Density separation modified	33-798	PP, PE, PS	FT-IR	[56]

		12-187	PP, PE, PS		
6,7, 8, 15, 17, 22, 27	Density separation adapted	76-1512	PE, PP, PL	Raman Spectroscopy	[74]
6	Sieve, visual sorting and buoyancy in saturated NaCl and $ZnCl_2$	10,7	PP, PS, PE, PET, PL, PA, SC	FTIR-ATR, Raman Spectroscopy	[67]
4	Density and elutriation separation	182.66 – 649.33	PE, PP, PET, PS, BB EPR, CTA	FTIR-ATR	[57]
6	Density separation	32,8	PA, PP, PE, PET	FT-IR	[66]
6	Sieving	3125.5	HDPE, LDPE, PP, PS	FTIR-ATR	[77]
17	Density separation modified	0 – 44.6	PET, PE, PP, SAN, PS, Nylon	FTIR-ATR	[70]

		0 – 82.1	PET, PE, PP, PS, EPS, Nylon, EPP		
3	Sieving and density separation modified	40-230	PE, PS, PP, PVC	FT-IR	[60]
4	Sieving and visual sorting	7.6-66.0	-	-	[63]
4	Sieving and visual sorting	43.62-72.0	-	-	[65]
12	Sieving and visual sorting	2,46	HDPE, PP, PE	FT-IR	[62]
26	Density separation modified	165-714	LDPE, LLDPE, HDPE, PA, iPP, sPP, PET, PEVA, PTFE, sPS	Differential scanning calorimetry (DSC)	[59]
4	Sieving and visual sorting	73	PVA, PA, PE, PP, PS, PVC, PF	FTIR-ATR	[64]
3	Density separation modified [51]	390-995	PS, PE, PP, PET	Raman Spectroscopy	This study

GSA: geographical subarea; GSA 3 - Southern Alboran Sea; GSA 4 - Algeria; GSA 6 – Northern Spain; GSA 7 - Gulf of Lion; GSA 8 - Corsica; GSA 9 - Ligurian and Northern Tyrrhenian Sea; GSA 10 - Central and Southern Tyrrhenian Sea; GSA 11 - Sardinia; GSA 12 - Northern Tunisia; GSA 15 - Malta; GSA 16 - Southern Sicily; GSA 17 - Northern Adriatic Sea; GSA 18 - Southern Adriatic Sea; GSA 19 - Western Ionian Sea; GSA 22 - Aegean Sea; GSA 26 - South Levant Sea; GSA 27 - Eastern Levant Sea.