

Annex 1. Existing standard methods for PAH-Determination in solid matrices

Standard	Applicable for matrix	Pretreatment	Extraction	Clean up + concentration	Analytical method	Nr. of PAH	LOD mg/kg (dm)	Remarks
DIN 38414 S23: 02.02	Sludge Sediment	A. original sample	(acetone+NaCl +H ₂ O + PE) shaking 6h (washing ??)	No clean up + DMF rot. evap.	HPLC/FLD	15	> 0.05	
		B. freeze dried or air dried	THF shaking 0.5h soni. at 40°C 0.5h	No clean up rot. evap. + methanol	HPLC/FLD	15	> 0.05	
								* if necessary
ISO 13877 :98 ISO/TC 190	A. less contamin. soil	original sample	acetone ;shaking15min; dekant.;acetone/PE shaking15min; washing	chromtogr. Alox 10%desact.. + ACN evap.	HPLC/DAD/FLD	16	> 0.01	Int.std 6-methyl-chrysene if approp.
	B. contamin. soil	air dried	toluene; soxhlet 4-8 h	No clean up direct analysis of extract	HPLC/DAD/FLD	16	> 0.1	
ISO DIS 18287: 09:02 ISO/TC 190	A. soil	original sample or chem. dried (ISO 14507)	acetone ;shaking15min; dekant.;acetone/PE shaking15min; washing	*chromtogr. Si- gel 10%desact.+ isooctane; evap.	GC/MS	16	> 0.01	Int.std(D-PAH) add to sample before Extr.
	B. soil (high organic)	original sample	(acetone + NaCl +H ₂ O + PE) shaking 6h (washing ??)	*chromtogr. Si- gel 10%desaact.+ isooctane; evap	GC/MS	16	> 0.01	Int.std(D-PAH) add to sample before Extr.
ÖNORM L1200 01:03	soil sewage-sludge compost	A. moist sample	(acetone + NaCl +H ₂ O + PE) shaking 16h *washing + keeper; evap.	*GPC, Si-gel + keeper ; evap.	HPLC/DAD/FLD GC/MS	15/16	> 0.02	Int.std(D-PAH) before Extr.
		B. dried sample	toluene, hexane or DCM; soxhlet 4-8 h	*GPC, Si-gel + keeper ; evap.	HPLC/DAD/FLD GC/MS	15/16	> 0.02	Int.std(D-PAH) before Extr.

