BT-4 Polycyclic Aromatic Hydrocarbons in Biota					
YEAR	**2021**	**Number of Rounds / Year**	**2**	**Number of Materials**	**2**
Distribution		**April, October** (35 laboratories expected)			
Participation fee		**€750,=**			

Introduction

This study covers the determination of Polycyclic Aromatic Hydrocarbons (PAH's) and total and extractable lipid in shellfish tissue test materials.

Test Materials

The test materials consist of natural shellfish species from contaminated waters from the North Sea and/or Mediterranean. The supplied wet shellfish tissues are homogenised and sterilised by autoclaving. These test materials have shown to be stable over a number of years when stored at room temperature.

Determinands and Concentration Ranges

The PAH's to be determined are given in the table below.
The table also shows:
- The expected concentration range for the determinands in the test materials.
- The constant and proportional error that will be used for assessment of the results.

Determinand	Unit	Concentration range	Error		AA-EQS
		Shellfish Tissue	Const	Prop	
Acenaphthene	µg/kg	0.5 - 100	0.2	12.5%	
Acenaphthylene	µg/kg	0.2 - 5	0.2	12.5%	
Anthracene	µg/kg	0.2 - 10	0.2	12.5%	
Benzo[a]anthracene	µg/kg	0.2 - 20	0.2	12.5%	
Benzo[a]fluorene	µg/kg		0.5	12.5%	
Benzo[a]pyrene	µg/kg	0.2 - 5	0.2	12.5%	5
Benzo[b]fluoranthene	µg/kg	0.2 - 10	0.2	12.5%	
Benzo[k]fluoranthene	µg/kg	0.2 - 10	0.2	12.5%	
Benzo[e]pyrene	µg/kg	0.2 - 10	0.2	12.5%	
Benzo[g,h,i]perylene	µg/kg	0.2 - 10	0.2	12.5%	
Chrysene	µg/kg	0.2 - 20	0.2	12.5%	
Chrysene+Triphenylene	µg/kg	0.2- -20	0.2	12.5%	
Triphenylene	µg/kg	0.1 - 10	0.5	12.5%	
Dibenz[a,h]anthracene	µg/kg	0.2 - 5	0.1	12.5%	
Dibenzo[a,i]pyrene	µg/kg		0.5	12.5%	
Dibenzothiophene	µg/kg	0.2 - 5	0.5	12.5%	
Fluoranthene	µg/kg	5 - 50	0.2	12.5%	30
Fluorene	µg/kg	1 - 50	0.2	12.5%	
Indeno[1,2,3-cd]pyrene	µg/kg	0.2 - 5	0.2	12.5%	
Naphthalene	µg/kg	1 - 100	0.2	12.5%	
1-methylnaphthalene	µg/kg		0.2	12.5%	
2-methylnaphthalene	µg/kg		0.2	12.5%	
1-methylanthracene	µg/kg		0.2	12.5%	
2- methylanthracene	µg/kg		0.2	12.5%	
1 methylphenanthrene	µg/kg		0.1	12.5%	
Perylene	µg/kg	0.1 - 5	0.5	12.5%	
Phenanthrene	µg/kg	2 - 50	0.2	12.5%	
2-Methylphenanthrene	µg/kg	0.2 - 20	2	12.5%	
3,6-Dimethylphenanthrene	µg/kg	0.2 - 10	0.5	12.5%	
1,2-benzodiphenylene sulfide	µg/kg		0.1	12.5%	
Pyrene	µg/kg	1 - 50	0.2	12.5%	
1-Methylpyrene	µg/kg		2	12.5%	
Benzo Fluoranthenes (a+b+j+k)	µg/kg		0.2	12.5%	
Total-Lipid	%		0.1	12.5%	
Extractable-Lipid	%		0.1	12.5%	
C1-dibenzothiophene	µg/kg		0.1	12.5%	
C2-dibenzothiophene	µg/kg		0.1	12.5%	

C3-dibenzothiophene	µg/kg		0.1	12.5%	
C1-phenanthrenes/anthracenes	µg/kg		0.2	12.5%	
C2-phenanthrenes/anthracenes	µg/kg		0.2	12.5%	
C3-phenanthrenes/anthracenes	µg/kg		0.2	12.5%	
C1-pyrenes/fluoranthenes	µg/kg		0.2	12.5%	
C2-pyrenes/fluoranthenes	µg/kg		0.2	12.5%	
C1-chrysenes	µg/kg		0.2	12.5%	
C2-chrysenes	µg/kg		0.2	12.5%	
C1-benzofluoranthenes	µg/kg		0.2	12.5%	
Total petroelum hydrocarbons	µg/kg		0.1	12.5%	

*Only determinands in **bold** are in the scope of the accreditation.*