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| <b>MS-8 Perfluorinated Alkyl Substances (PFAS) in sediment</b> |  |
| Year: 2024   | Participants: 10 laboratories expected |
| Number of rounds: 2 per year                                   | Start exercise: 1 April, 1 October     |
| Number of materials: 2 per round                               | Sample size: 50 g                      |

[Participation form](#)
[Timetable](#)
[PT Scheme](#)
[Costs](#)

This study covers the determination of perfluorinated alkyl substances (PFAS) in sediment. This exercise can only be joined in both rounds as relatively low number of participants are expected.

## Test Materials

The test materials cover a range of natural sediments from contaminated waters from the North Sea and/or Mediterranean. Each batch of material is prepared in bulk. The level of within and between sample homogeneity for the sediment is determined. All materials show to be homogeneous and stable for the purpose of the test.

## Determinands and concentration ranges

The PFAS 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 |      | CAS number |
|-------------|-------|---------------------|-------|------|------------|
|             |       | Sediment            | Const | Prop |            |
| n-PFOS      | µg/kg | 0.05-2              |       |      | 1763-23-1  |
| PFBA        | µg/kg |                     |       |      | 375-22-4   |
| PFPeA       | µg/kg |                     |       |      | 2706-90-3  |
| PFHxA       | µg/kg |                     |       |      | 307-24-4   |
| PFHxDA      | µg/kg |                     |       |      | 67905-19-5 |
| PFHpA       | µg/kg |                     |       |      | 375-85-9   |
| PFOA        | µg/kg |                     |       |      | 335-67-1   |
| PFNA        | µg/kg |                     |       |      | 375-95-1   |
| PFDA        | µg/kg |                     |       |      | 335-76-2   |
| PFUnDA      | µg/kg | 0.001-1             |       |      | 2058-94-8  |
| PFDoA       | µg/kg | 0.001-0.1           |       |      | 307-55-1   |
| PFTTrDA     | µg/kg | 0.01-0.1            |       |      | 72629-94-8 |
| PFTeDA      | µg/kg | 0.001-1             |       |      | 376-06-7   |
| L-PFBS      | µg/kg |                     |       |      | 375-73-5   |
| L-PFHxS     | µg/kg |                     |       |      | 355-46-4   |
| L-PFHpS     | µg/kg |                     |       |      | 375-92-8   |
| PFOSA       | µg/kg | 0.01-1              |       |      | 754-91-6   |
| PFDS        | µg/kg |                     |       |      | 335-77-3   |

| Determinand   | Unit  | Concentration Range | Error |      | CAS number   |
|---------------|-------|---------------------|-------|------|--------------|
|               |       | Sediment            | Const | Prop |              |
| PFOA          | µg/kg |                     |       |      | 16517-11-6   |
| Total-PFOS    | µg/kg | 0.05-2              |       |      | 1763-23-1    |
| GenX          | µg/kg |                     |       |      | 62037-80-3   |
| F-53B         | µg/kg |                     |       |      | 73606-19-6   |
| PFBSA         | µg/kg |                     |       |      | 30334-69-1   |
| PFHxSA        | µg/kg |                     |       |      | 41997-13-1   |
| PFPeS         | µg/kg |                     |       |      | 2706-91-4    |
| NMeFOSAA      | µg/kg |                     |       |      | 909405-48-7  |
| NEtFOSAA      | µg/kg |                     |       |      | 2991-50-6    |
| ADONA         | µg/kg |                     |       |      | 958445-44-8  |
| 6:2 FTOH      | µg/kg |                     |       |      | 647-42-7     |
| 8:2 FTOH      | µg/kg |                     |       |      | 678-39-7     |
| C604          | µg/kg |                     |       |      | 1190931-41-9 |
| Total-PFBS**  | µg/kg |                     |       |      | 373-73-5     |
| Total-PFHxS** | µg/kg |                     |       |      | 355-46-4     |
| Total-PFHpS** | µg/kg |                     |       |      | 375-92-8     |

\* This exercise is not in the scope of accreditation.