

BT-12 PSP Shellfish Toxins	
Year: 2025	Participants: 40 laboratories expected
Number of rounds: 2 per year	Start exercise: 1 April, 1 October
Number of materials: 4 per round	Sample size: > 2.5 g

Participation form	Timetable	PT Scheme	Costs
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This study covers the determination of paralyzing shellfish toxins (PSP) in shellfish tissue test materials.

Test Materials

The test materials cover a range of natural unspiked biota types. Wet biota test materials are homogenised and sterilised by autoclaving. Biota test materials have been shown to be stable over a number of years when stored frozen. After receipt, samples should be analysed as soon as possible or, if this is not possible, stored in the freezer until analysis. PSP shellfish toxin samples are stable at room temperature for a limited amount of time (few days).

Determinands and concentration ranges

The PSP shellfish 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.

Results should be reported for as many of these determinands as possible. Take this opportunity either to develop your methodology or check your performance on the less common determinands.

C1 N-sulfocarbamoyl toxins C1 (equal for C2, C3 and C4)

Determinand	Unit	Concentration range	Error	
			Const	Prop
11-OH-STX (11-hydroxy-Saxitoxin) [§]	µmol/kg			
C1 [§]	µmol/kg	0.01-5		
C1,2	µmol/kg	0.01-5	0.25	25.0%
C2	µmol/kg	0.01-1		
C3 [§]	µmol/kg			
C3,4 [§]	µmol/kg			
C4 [§]	µmol/kg			
dc-GTX1 (Gonyautoxin) [§]	µmol/kg			
dc-GTX1,4 [§]	µmol/kg			
dc-GTX2 [§]	µmol/kg	0.01-1		
dc-GTX2,3 [§]	µmol/kg		0.1	25.0%
dc-GTX3	µmol/kg			
dc-GTX4 [§]	µmol/kg			
dc-NEO (Neo saxitoxin) [§]	µmol/kg	0.01-2		
dc-STX [§]	µmol/kg	0.01-5	0.05	25.0%
GTX-1	µmol/kg	0.01-1	0.15	12.5%
GTX-2	µmol/kg	0.01-10	0.2	20.0%

Determinand	Unit	Concentration range	Error	
			Const	Prop
GTX-3	µmol/kg	0.01-2	0.04	17.5%
GTX-4 [§]	µmol/kg	0.02-1		
GTX-5	µmol/kg	0.05-5	0.04	25.0%
GTX-6 [§]	µmol/kg			
NEO [§]	µmol/kg	0.02-1	0.15	25.0%
STX	µmol/kg	0.05-5	0.1	20.0%
Total toxicity	µgSTXdiHCl- eq/kg	50-3000	65	25.0%
GTX-2,3	µmol/kg	0.05-10	0.01	25.0%
GTX-1,4 [§]	µmol/kg	0.01-2	0.4	25.0%

§ Determinands are not in the scope of accreditation