

SAMPLING STANDARD - US EPA 23

Short guideline how to spike the sampling standard

ALS CR provides spiking of sampling train or provides sampling standard for emission sampling according to the required methodology

- Sampling standards according to the specific required methodology – US EPA 23
- Vial ready to spike
- Single dose for easiness of use



The sampling $^{13}\text{C}_{12}$ and $^{37}\text{Cl}_4$ labelled standards has the following composition:

Methodology	Labelled	Composition of the sampling standard	Application-on field
US EPA 23	S23	$^{37}\text{Cl}_4$ -2,3,7,8-TCDD	Whole vial before sampling
		$^{13}\text{C}_{12}$ -1,2,3,4,7,8-HxCDD	
		$^{13}\text{C}_{12}$ -2,3,4,7,8-PeCDF	
		$^{13}\text{C}_{12}$ -1,2,3,4,7,8-HxCDF	
		$^{13}\text{C}_{12}$ -1,2,3,4,7,8,9-HpCDF	

The sampling standard solution shall be at least 100 μl .

XAD-2 can be spiked in our laboratories prior to delivery of the trap.

Application of the sampling standard

1.Addition to solid sorbent

- The full dose is uniformly and slowly distributed on the surface and inside the solid sorbent (XAD-2) to avoid any loss.
- After application of the full volume, rinse the vial with a minimum of 200 μL of dichloromethane, and distribute this amount the same way as you apply the standard on the sorbent with the same micro syringe or pipette.

ALS recommends to proceed the rinses by dichloromethane at least twice (2*200 μL dichloromethane). Losses are most often due to an incomplete spike of the full vial on the sorbent.

General warning:

Loss of sampling standard during application reduces the values of recovery.

If more doses of sampling standard are added during the sampling, each of them should be quantitatively applied. Information on number of doses and spiking locations of the standard shall be documented prior to analysis in the laboratory, so that the calculation of recoveries can be correctly carried out.

Ordering

To benefit from this service, either fulfil the specific chain of custody or order on line at:

<http://sampling.alsglobal.eu>

In case of any questions do not hesitate to contact us: