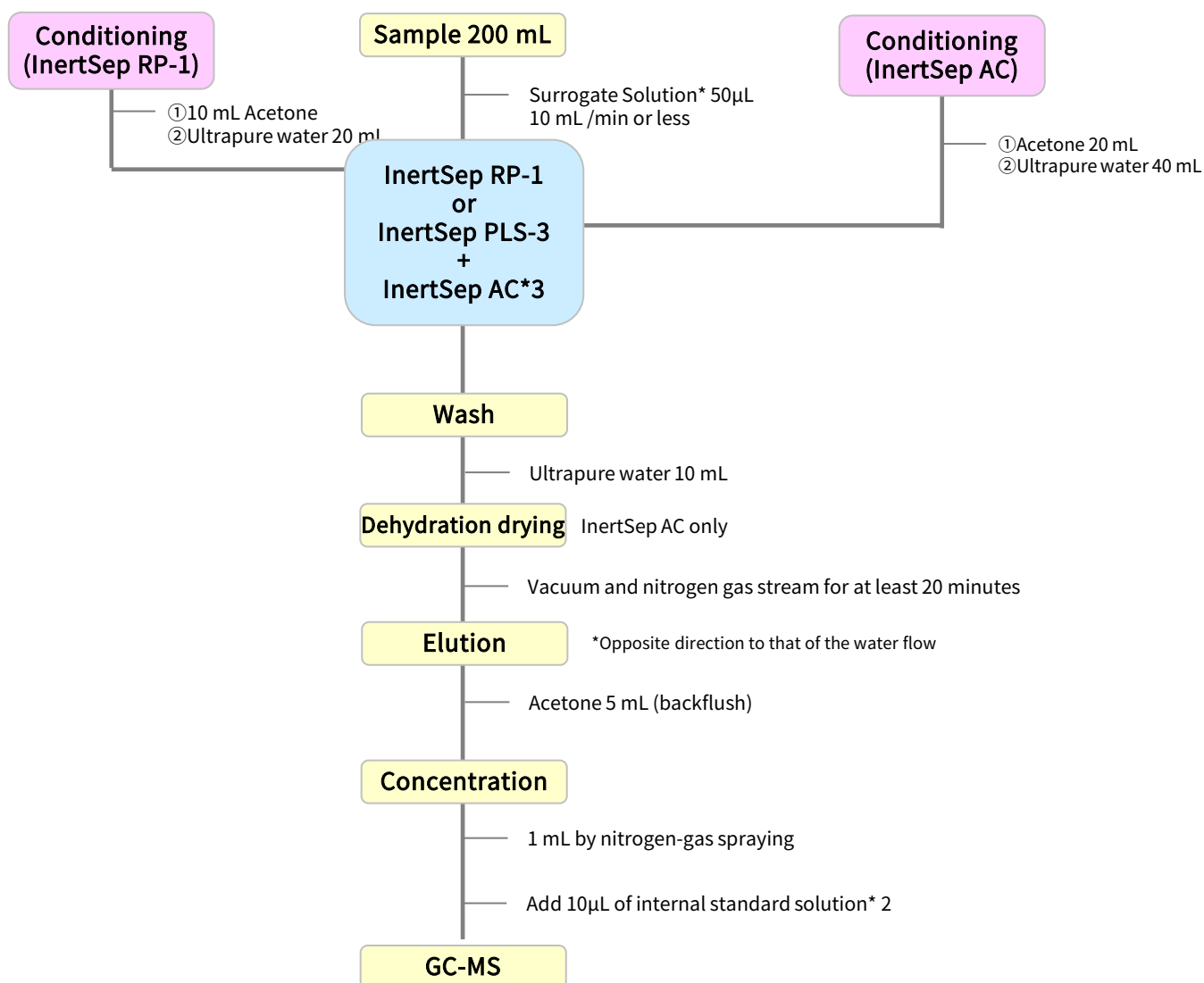


Analysis of 1,4-dioxane in environmental water (GC/MS method)

1,4-Dioxane was added as a compound to the environmental quality for public waters and groundwater as a water quality standard for the protection of human health (announced and enforced November 30, 2009).

1,4-Dioxane is not retained on reversed-phase solid phases, such as C18 and SDB, because it is highly water-soluble. Therefore, solid phase extraction is carried out using activated carbon with high retention capacity in reversed phase distribution.

1. Flow diagram of solid phase pretreatment



*1:1,4-dioxane-d 4

*2:4-bromofluorobenzene

*3:2 pcs of InertSep AC (activated carbon solid phase columns) can be connected to increase the recovery rate

Reference: Environmental Quality Standards for Water Pollution (Appendix 7 1) issued by the Ministry of the Environment

2. Products for Solid-phase extraction

[InertSep AC]

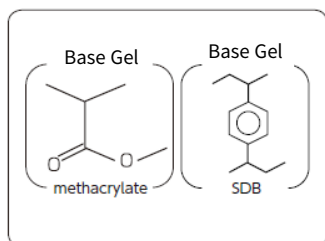
Maternal : Active Carbon
 Mean particle size : 100 μm
 Surface Area : 900 m²/g

InertSep AC uses activated carbon classified by particle size with excellent liquid permeability. Since purified activated carbon is used, there is no risk of impurities leaching out. It has excellent retention of highly polar substances, with high recovery rate and reproducibility. It uses a luer device and can be easily connected to an automatic solid-phase extraction device.

Luer device cartridge

Product name	Column size	Quantity	Cat.No.
InertSep SlimJ AC (Active Carbon)	400 mg	50 bottles	5010-25500

[InertSep RP-1]



Mean particle size : 70 μm
 Surface Area : 650 m²/g
 Pore volume : 1.5 mL/g
 Pore size : 90 Å
 PH range of use : 1 - 14

InertSep RP 1 is a polymeric solid phase based on SDB and methacrylate. It is optimal for enrichment of a wide range of compounds from low to medium high polarity.

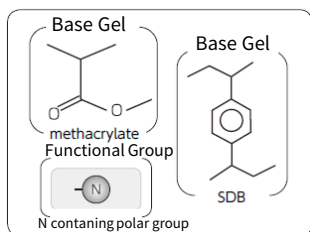
Syringe barrel type cartridge

Product name	Column size	Quantity	Cat.No.
InertSep RP-1	250 mg/6 mL	30 bottles	5010-27000
	500 mg/6 mL	30 bottles	5010-27004
	500 mg/12 mL	20 bottles	5010-27005

Luer device cartridge

Product name	Column size	Quantity	Cat.No.
InertSep mini RP-1	230 mg	50 bottles	5010-27200
		500 bottles	5010-27220

[InertSep PLS-3]



Mean particle size : 60 μm
 Surface Area : 600 m²/g
 Pore volume : 1.1 mL/g
 Pore size : 70 Å
 PH range of use : 1 - 14

InertSep PLS 3 is a polymeric solid phase of N-containing methacrylate and SDB. A wide range of substances can be collected, ranging from highly polar compounds to hydrophobic compounds with excellent retention power.

Syringe barrel type cartridge

Product name	Column size	Quantity	Cat.No.
InertSep PLS-3	200 mg/6 mL	30 bottles	5010-25050
InertSep Glass PLS-3	200 mg/6 mL	20 bottles	5010-26020

Luer device cartridge

Product name	Column size	Quantity	Cat.No.
InertSep SlimJ PLS-3	230 mg	50 bottles	5010-25200
		500 bottles	5010-25205

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