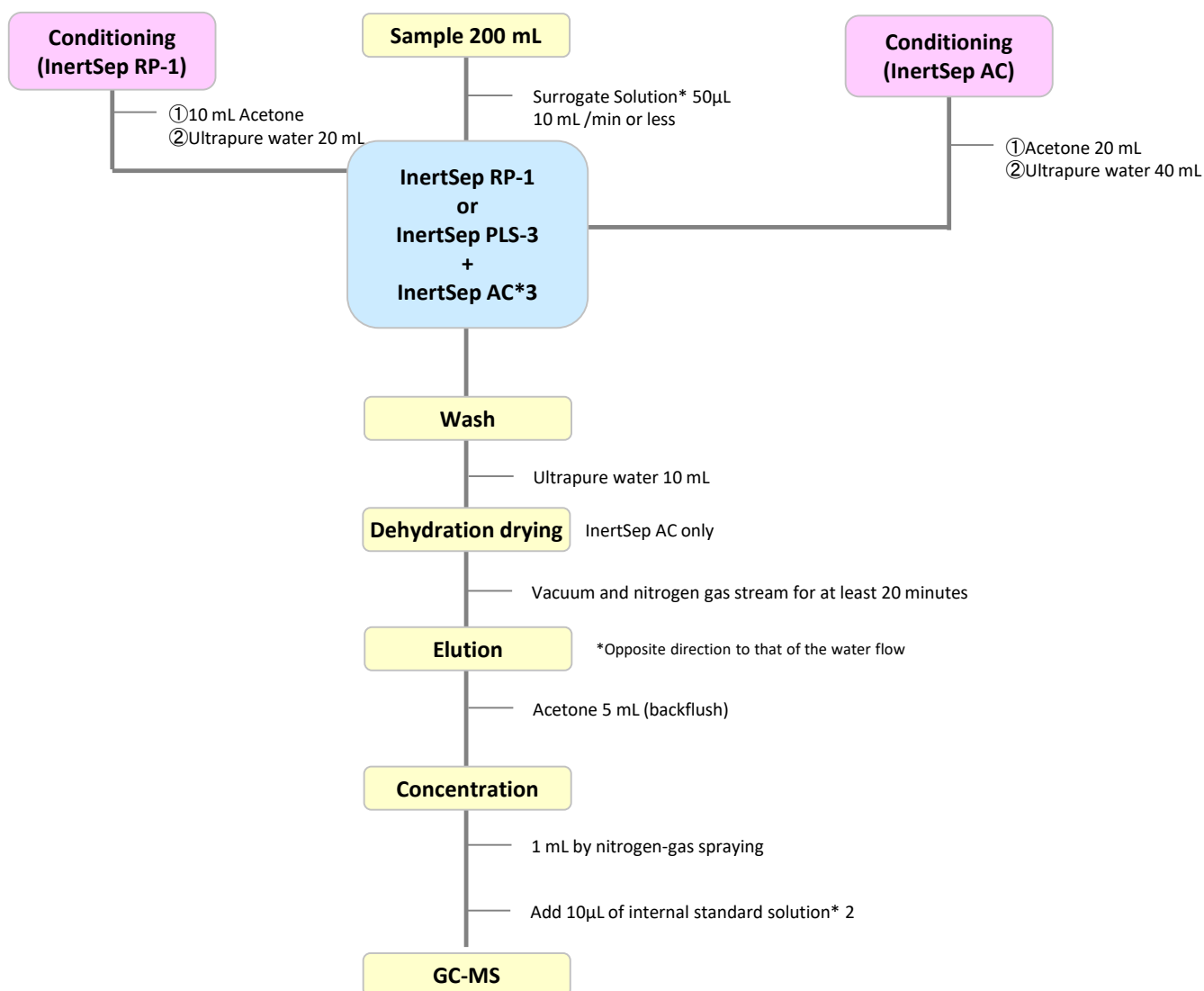


Analysis of 1,4-dioxane in environmental water (GC/MS method)

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]

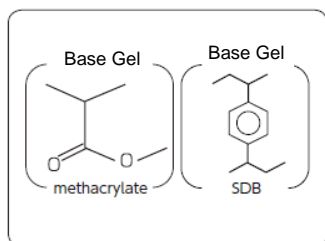
Maternal : Active Carbon
 Mean particle size : 100 μm
 Surface Area : 900 m^2/g

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 m^2/g
 Pore volume : 1.5 mL/g
 Pore size : 90 \AA
 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.

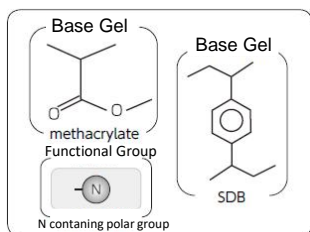
Syringe barrel type cartridge

| 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 m^2/g
 Pore volume : 1.1 mL/g
 Pore size : 70 \AA
 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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