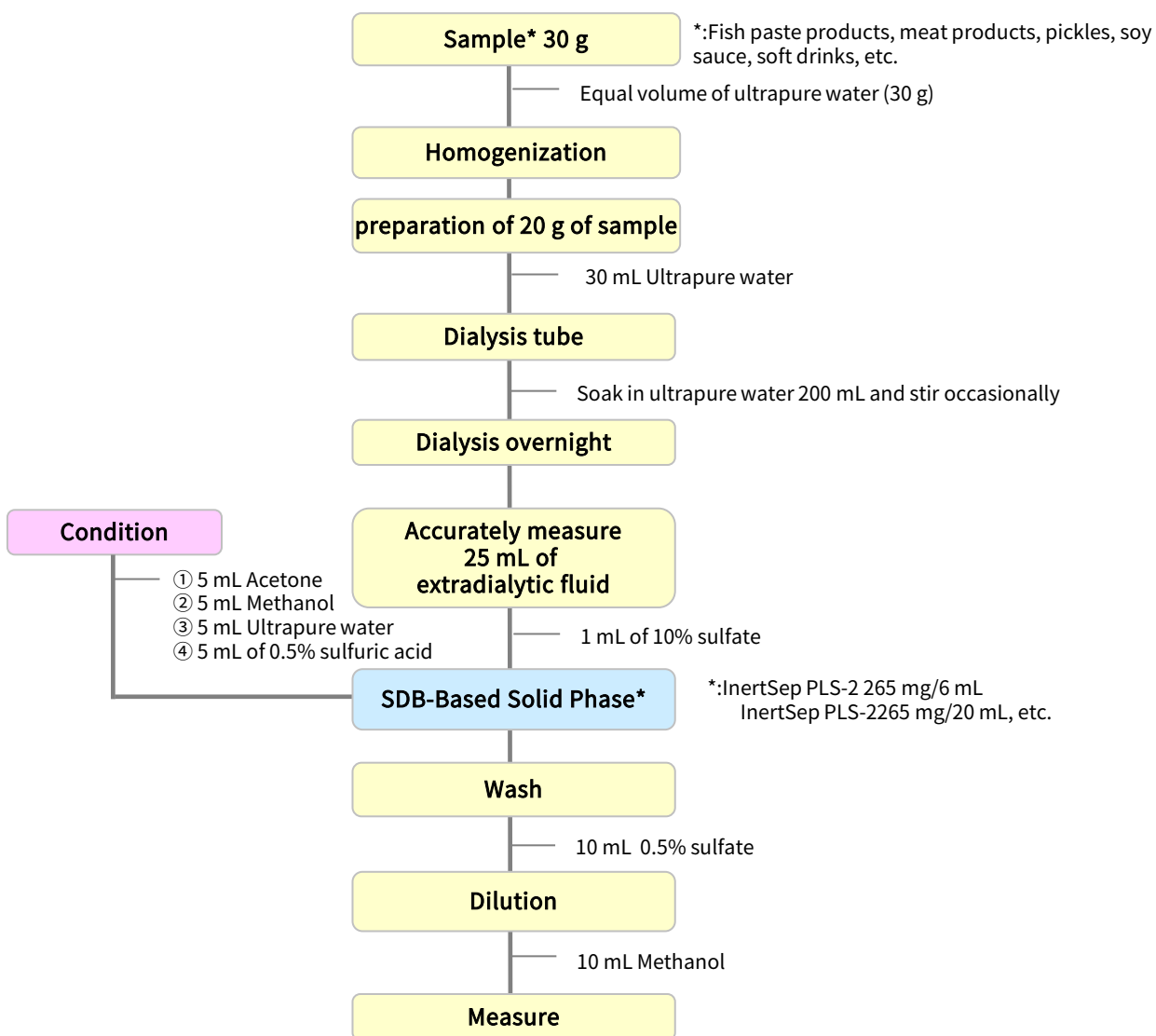


Simultaneous Analysis of Saccharin and Preservatives in Foods

The standard Hygiene Test Method employs both dialysis extraction for saccharin in foods, and steam distillation for sorbic acid and benzoic acid. Therefore, the extraction process and assay conditions are different for each target component, making it more complex to perform the analytical procedure.

In this application note, we introduce an analytical method combining dialysis extraction, which provides easier extraction of a variety of sample types, with solid-phase extraction, which offers a much simpler purification procedure.

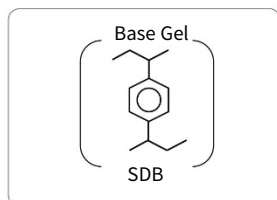
1. Flow diagram of solid phase pretreatment



(NOTE) This is a method developed by GL Sciences based on literature information.
Reference: Journal of the Japanese Society of Food Chemistry, Vol. 5(2), 153-158 (1998).

2. Products for solid-phase extraction

[InertSep PLS-2]



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 2 is a cartridge filled with styrene divinylbenzene polymer gel (SDB). It has a retention capacity greater than C18 and excellent stability in a wide pH range.

Syringe barrel type cartridge

Product name	Column size	Qty.	Cat.No.
InertSep PLS-2	265 mg/6 mL	50 bottles	5010-27430
	265 mg/20 mL	20 bottles	5010-27431
	270 mg/6 mL	50 bottles	5010-25020
	500 mg/6 mL	30 bottles	5010-25025
	500 mg/20 mL	20 bottles	5010-25036

[Accessories for making connections between solid-phase extraction cartridges]



Cartridge connection adaptor

Cartridge adaptor used to connect syringe barrel and LSC cartridges.

Product name	Specification	Qty.	Cat.No.
Solid Phase Extraction Cartridge Connection Adaptor (PP)	For 1,3,6 mL reservoirs	12	5010-60000
	For 12,20 mL reservoirs	12	5010-60001



Empty reservoir

Used when the sample volume is greater than the cartridge capacity.

Product name	Specification	Qty.	Cat.No.
Empty reservoir (PP) No frits	12 mL	20 bottles	5010-60103
	20 mL	20 bottles	5010-60104
	60 mL	10 bottles	5010-60105
	150 mL	10 bottles	5010-60106



Adapted reservoir

This reservoir can be directly connected to syringe barrel type solid phase cartridges, supplied in volumes of 1, 3 and 6 mL.

Product name	Specification	Qty.	Cat.No.
25 mL reservoir with 1,3,6 mL adapter	PP product	12	5010-60015

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