ST012 GL Sciences Inc.

Simultaneous Analysis of Pesticides, etc. by GC/MS Simultaneous Analysis of Pesticides, etc. by LC/MS (crops: grains and legumes)

The Food Sanitation Law was amended in May 2003, and pesticides, etc. were regulated under a positive list system from May 2006. The introduction of this system has led to the use of several simultaneous multi-component testing methods to increase the efficiency of testing.

This test method introduces the pretreatment of crops for residual pesticide analysis by GC/MS and LC/MS, which were included at the same time in the notification of the positive list system.

1. Flow diagram of solid phase pretreatment





2. Products for solid-phase extraction

[InertSep C18]

Si-(C	che	
		lt is
Mean particle		res
size	: ου μπ	Svrir
Carbon	: 19 %	-,
End-capping	: Yes	
Surface Area	: 450 m²/g	
Pore volume	: 0.7 mL/g	
Pore size	: 60 Å	Ine
PH range of use	: 2-8	

InertSep C18 is a minicolumn with non-polar interaction in which octadecyl groups are chemically bonded to silica gel. Residual silanol groups prevents cation exchange interactions, resulting in reduced adsorption of basic compounds.

It is suitable as a clean-up solid phase for removing lipids in the concurrent test method for residual pesticides.

Syringe barrel type cartridge

Product name	Column size	Qty.	Cat.No.
	1 g / 6 mL	30 bottles	5010-61005
InertSep C18	1 g / 12 mL	20 bottles	5010-61015
	1 g / 20 mL	20 bottles	5010-61014

[InertSep C18/DRY]

InertSep C18 DRY is a clean-up cartridge with two layers: delipidating C18 and dehydrating DRY. It is used for pretreatment of residual agricultural chemicals prior to analysis.

InertSep DRY

InertSep C18

Si-(CH ₂)17CH ₃	Mean particle size Carbon End-capping	: 60 μm : 19 % : Highly End-capping	Na ₂ SO ₄			
	Surface Area Pore volume Pore size PH range of use	: 450 m²/g : 0.7 mL/g : 60 Å e : 2 - 8				
Svringe barrel type cartridge						

Product name		Column size	Qty. Cat.No.	
InertSep C18/DRY	Recommended for this application	1 g / 3 g / 12 mL	20 bottles	5010-68133

[InertSep GC/NH2]

Two layers of decolorizing GC and clean-up solid-phase NH2 and PSA providing purification that is not achievable using the GC phase alone.

InertSep GC Maternal : G Mean particle : 1 size Surface Area : 8 Pore capacity : 1 Pore size : 4	aphite Carbon	InertSep NH2		Mean particl size Carbon	e : 60 : 10	: 60 μm : 10 %		
	Surface Area : 85 Pore capacity : 1.0 Pore size : 45	0 - 400 mesh m²/g 0 mL/g 0 Å Syringe barrel type cartridge	Si	-(CH ₂)3-NH ₂	Surface Area: 45Pore volume: 0.7Pore size: 60Ion exchange: 0.5capacity: 0.5PH range: 2		;0 m²/g 7 mL/g) Å 9 meq/g - 8	
NH2		Product name	e	Column size	C	Qty.	Cat.No.	
				500 mg / 500 mg / 6 mL	30 k	oottles	5010-68022	
Ū		InertSep GC/NH2		500 mg / 500 mg / 20 mL	20 k	oottles	5010-68024	
				1 g / 1 g / 20 mL	20 k	oottles	5010-68025	

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GL Sciences, Inc. Japan 22-1 Nishishinjuku 6-Chome Shinjuku-ku, Tokyo, 163-1130, Japan Phone: +81-3-5323-6620 Fax: +81-3-5323-6621 Email: world@gls.co.jp Web: www.glsciences.com GL Sciences B.V. De Sleutel 9 5652 AS Eindhoven The Netherlands Phone: +31 (0)40 254 95 31 Email: info@glsciences.eu Web: www.glsciences.eu GL Sciences (ShangHai) Ltd. Tower B, Room 2003, Far East International Plaza, NO,317 Xianxia Road, Changning District. Shanghai, China P.C. 200032 Phone: +86 (0)21-6278-2272 Email: <u>contact@glsciences.com.cn</u> Web: www.glsciences.com.cn

GL Sciences, Inc. USA 4733 Torrance Blvd. Suite 255 Torrance, CA 90503 Phone: 310-265-4424 Fax: 310-265-4425 Email: info@glsciencesinc.com Web: www.glsciencesinc.com

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