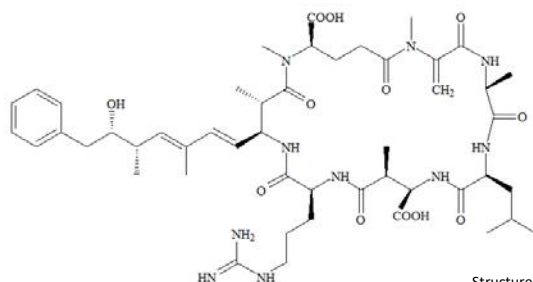


Microcystins are cyclic peptides specified in the Hygiene Testing Methods, and are readily retained on silica-based solid-phase discs (Empore Disk C18) and polymer-based Empore Disk SDB. If the sample contains large amounts of algae, such as lake water, it is recommended that the filtrate be extracted directly using a solid phase after filtration through a glass membrane filter, and that the algae on the filter be ultrasonically extracted with a 5 % acetic acid solution. In order to eliminate contaminants from the sample, it is recommended that it is cleaned-up with a silica-gel solid phase if necessary.

## 1. Flow diagram of solid phase pretreatment

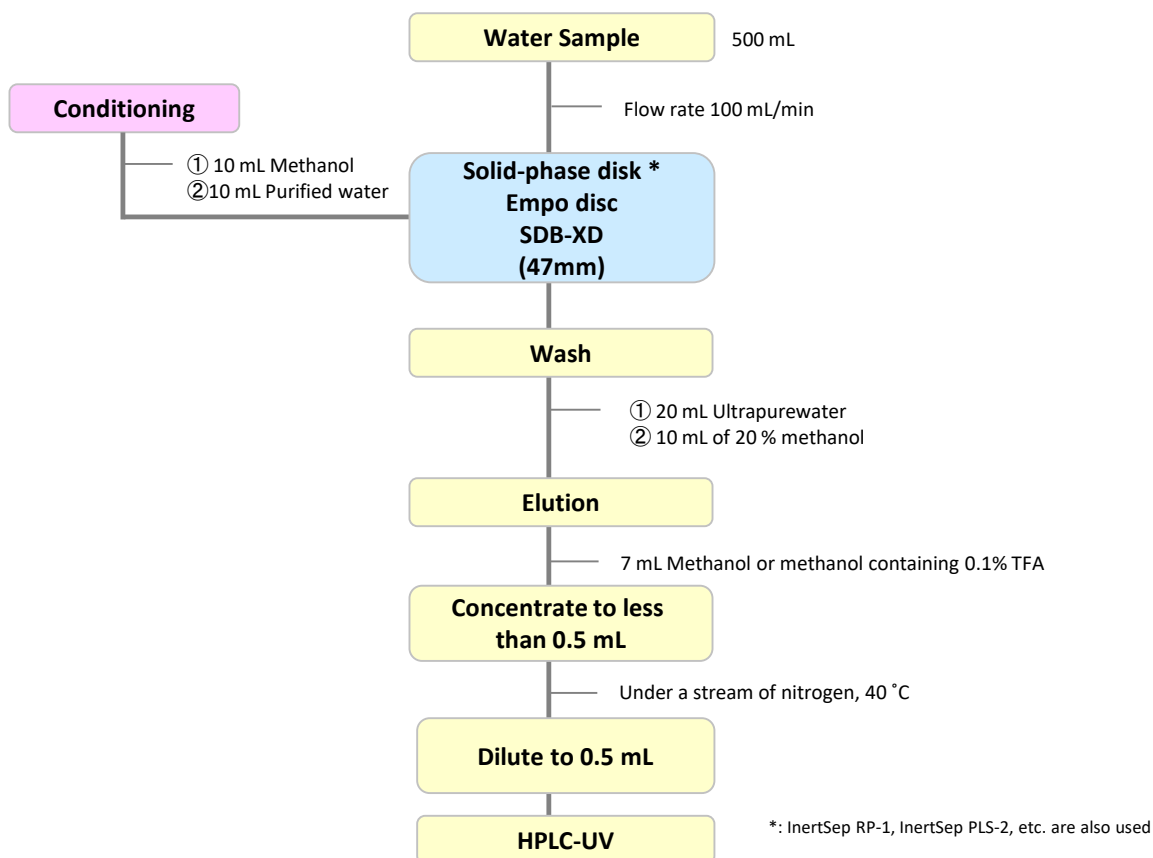
[Structural formula of microcystin]



Microcystin

Structures are created using Chemistry 4-D Draw which is provided by ChemInnovation Software, Inc.

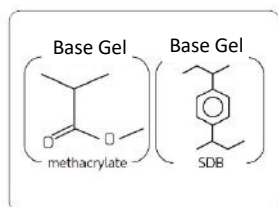
[Example of pretreatment of microcystin]



NOTE) This is a method developed by GL Sciences based on literature information.  
Reference: Solid Phase Extraction Guidebook

## 2. Products for solid-phase extraction

### [InertSep RP-1]



Mean particle size : 70  $\mu\text{m}$   
 Surface Area : 650  $\text{m}^2/\text{g}$   
 Pore volume : 1.5  $\text{mL}/\text{g}$   
 Pore size : 90  $\text{\AA}$   
 PH range of use : 1 - 14

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

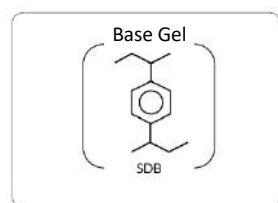
#### Syringe barrel type cartridge

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

### [InertSep PLS-2]



Mean particle size : 60  $\mu\text{m}$   
 Surface Area : 600  $\text{m}^2/\text{g}$   
 Pore volume : 1.1  $\text{mL}/\text{g}$   
 Pore size : 70  $\text{\AA}$   
 PH range of use : 1 - 14

InertSep PLS 2 is a cartridge filled with a styrene divinylbenzene polymer gel (SDB) that behaves in a reversed-phase mode similar to C18. It has a retention capacity greater than C18 and has 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

#### Luer device cartridge

Product name	Column size	Qty.	Cat.No.
InertSep SlimJ PLS-2	230 mg	50 bottles	5010-65720
	265 mg	50 bottles	5010-65721

GL Sciences disclaims any and all responsibility for any injury or damage which may be caused by this data directly or indirectly. We reserve the right to amend this information or data at any time and without any prior announcement.

#### **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@glsc.co.jp](mailto:world@glsc.co.jp)  
 Web: [www.glsciences.com](http://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](mailto:info@glsciences.eu)  
 Web: [www.glsciences.eu](http://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: [contact@glsciences.com.cn](mailto:contact@glsciences.com.cn)  
 Web: [www.glsciences.com.cn](http://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](mailto:info@glsciencesinc.com)  
 Web: [www.glsciencesinc.com](http://www.glsciencesinc.com)

#### **International Distributors**

Visit our Website at [www.glsciences.com/distributors](http://www.glsciences.com/distributors)