

Packing material for HITACHI Solid Phase Extraction

NOBIAS CHELATE-PA1 GEL

NOBIAS CHELATE-PB1 GEL

INSUTRUCTION MANUAL

This product is intended for research use only.

It is not to be used for reporting patient diagnostic or therapeutic results.

Please read through this manual carefully and keep it in a safe place.

- Before using the product, read the safety instructions and precautions carefully.
- Keep this manual in a safe place nearby so it can be referred to whenever needed.

Be sure to read through and understand the following points with regard to this manual.

1. Information contained in this document is subject to change without notice for improvement.
2. This manual is copyrighted by Hitachi High-Technologies Corporation with all rights reserved.
No part of this manual may be reproduced, transmitted or disclosed to a third party in any form or by any means without the express written permission of Hitachi High-Technologies Corporation.
3. Hitachi High-Technologies Corporation assumes no liability for any direct, indirect, or consequential damages arising from use not described in this manual. Utmost care must be exercised when using the instrument.
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Hitachi High-Technologies Corporation

1 PREFACE

We thank you for purchasing the packing material for Hitachi Solid Phase Extraction (NOBIAS CHELATE-PA1 GEL and NOBIAS CHELATE-PB1 GEL).

This product is specifically designed to separate target components in a sample. The sample for infection with bacteria or viruses cannot be used.

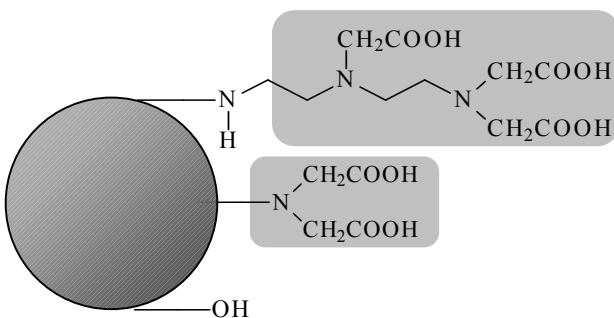
This product is intended for use by persons having a basic knowledge of chemical analysis procedures. Keep in mind that improper use of analytical instruments, chemicals or samples would result not only in wrong analytical data but also in consequences adverse to safety. Note that it is allowed only for persons having a basic knowledge of chemical analysis procedures to use this instrument.

The pretreated sample is measured with analysis instrument, such as a liquid chromatograph. Before using the analysis instrument, read carefully the instruction manual accompanying each of these units so that you can carry out analysis properly for safety summary.

2 ABOUT THIS MANUAL

This instruction manual has been prepared for the user of the packing material for Hitachi Solid Phase Extraction (NOBIAS CHELATE-PA1 GEL and NOBIAS CHELATE-PB1 GEL). Specifications, important information about using the product, proper use, warranty and disposal are contained in this manual.

3 OUTLINE

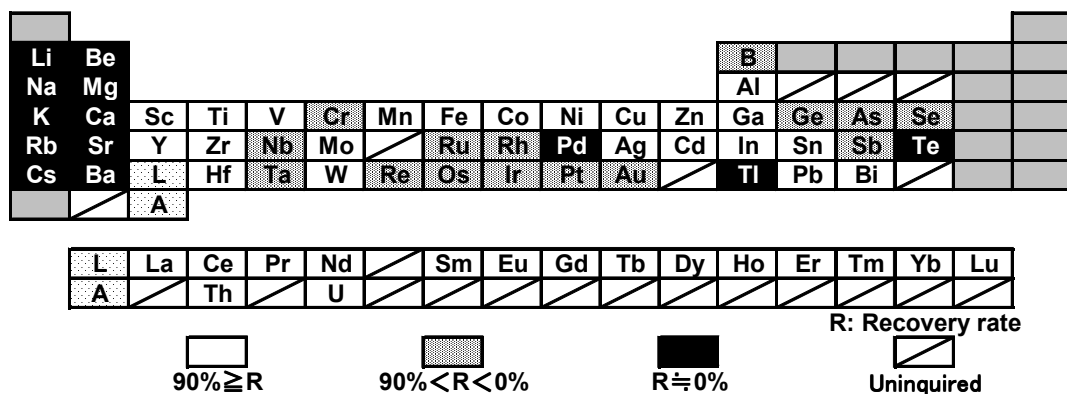


< The structure of NOBIAS CHELATE >

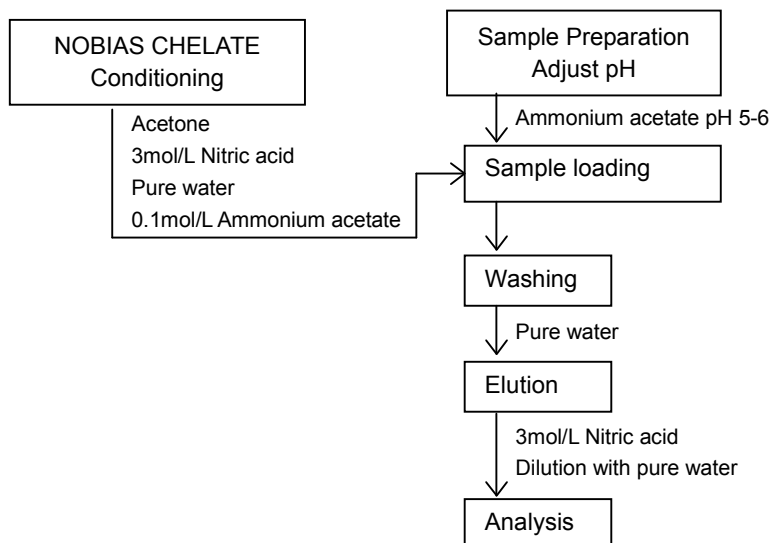
NOBIAS CHELATE PA-1 uses hydrophilic methacrylate, and PB-1 uses divinylbenzene/methacrylate copolymer for packing-based material.

The packing-base material is chemically modified with Ethylenediamine triacetic acid and Iminodiacetic acid as chelating agent for metal capture.

It captures transition metals without the influence of alkali/alkaline-earth metals under acidic conditions, so it can be used for the analysis of transition metals in environmental water and biological samples.



< The recovery rate of elements using NOBIAS CHELATE (pH6) >



< The example of an operating procedure of NOBIAS CHELATE >

4 NOTES FOR THE USAGE OF PACKING

- Use the product only for tests and researches.
- We assume no responsibility for any troubles resulting from the use of this product for other than the test or the research.
- A customer is responsible for selection of conformity of the packing material for a customer's purpose.
- Pre-treat the packing material with an organic solvent or pure water before sample injection.
- Avoid reusing disposable packing material.
- Check the MSDS (Material Safe Data Sheet) about used reagent and solvent and treat appropriately.
- Wear protective glasses when using reagents and solvents.
- Avoid breathing vapor. Be sure to provide proper ventilation of the laboratory room per local requirements
- Check the chemical resistance of the material, when the packing material is used for the cartridge of the glass column etc.
- Wear protective glasses when weighing packing material.
- To avoid infection by a sample, please use it in the laboratory room where safety standards are met.
- Avoid giving such impact as drop and vibration to the packing material.
- For the analytical instrument for the sample pretreated using the packing material, the performance of the analysis conditions or sensitivity for the target ingredient should be checked and used.

5 WARRANTY

5-1 Warranty period

The warranty is effective for fourteen days from the date of delivery under the following conditions.

- 1) Avoiding direct sunlight.
- 2) Store in a cool place (5 to 40 °C)

5-2 Scope of warranty

The replacement of the product is done when there are the followings in the guaranteed term.

It's made immunity from responsibility besides those.

There is damage on externals of the packing material by the cause judged our material and manufacturing.

There is a physical change, such as the packing material is leaked, though the case is flawless.

5-3 Guarantee exclusion matter

In the guaranteed term, the product is excluded from the object of the guarantee when corresponding to the following.

- 1) The packing material degradation in case of by use after opening.
- 2) By the customer's improper handling or use.
- 3) When the defective cause depends on reason besides our company.
- 4) Due to fire, earthquake, storm and flood damage, thunderbolt, riot, crime, terrorism, war and other inevitable accidents.
- 5) When using by the place that has not suited the environment that our company provided.
- 6) The trouble caused by the movement or transportation after delivery.
- 7) The trouble that is resolved or remodeled without admitting by our company, and caused.
- 8) At the compensation for passive damages such as the negative damage, the indirect damage and the secondary damage caused from the analysis result and fractionation of obtaining by using this product.
- 9) Demands that are reliability, effectiveness and safety etc. of analysis result and fractionation obtained by using the product.

It isn't guaranteed besides the guarantee of the specification based on the guarantee contents raised in this item. In adaptability to express or implied quality, performance, commercial value or what specific use, it isn't guaranteed.

6 DISPOSAL

- Dispose the packing material for the sample not remaining after confirming by an extraction test etc. to the packing material, when a sample with the possibility of environmental disruption was used.
- Although at present the packing material does not use materials that would directly cause environmental disruption, the environmental protection laws and regulations may be revised or amended. When planning to dispose of the product, therefore, be sure to check the latest issues of the relevant laws and regulations or consult the maintenance service company we designate.
- Be sure to collect waste solution and treat it for proper disposal in accordance with the relevant laws and regulations regarding water pollution control and sewage treatment. Improper treatment of waste solution may result in environmental pollution and could also lead to a penalty.

7 INQUIRY

Please inform the following inquiry of a question about this product.

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