



MANUAL

RSpak DS-413



Columns manufactured by Showa Denko K.K Japan Made in Japan **Shodex HPLC Columns** Europe, Middle East, Africa, Russia

For technical support please use contact details shown below:

SHOWA DENKO EUROPE GmbH

Shodex Business Konrad-Zuse-Platz 3 81829 Munich, Germany

E-mail: support@shodex.de Phone: +49 (0)89 93 99 62 37 www.shodex.de

Operation Manual

Shodex[™] RSpak[™] DS-413

(Please read this manual carefully before using the column to ensure performance and life.)

1. Introduction

Shodex RSpak DS-413 is a high-performance HPLC column for adsorption/partition chromatography. The column is suited for the separation of Organic compounds having low-molecular.

2. Specifications

Endfitting:	Internally-threaded type, No.10 32 UNF.
Column material:	SUS 316.
Packing material:	Polystyrene-divinylbenzene copolymer.
Column size:	4.6mm ø x 150mm.
Theoretical plates:	> 10,000 per column.
In-column solvent:	$CH_3CN/THF/H_2O = 30/30/40.$

3. Usable condition

Max. flow rate:	1.0 ml/min.
Max. pressure:	20 MPa.
Temperature:	20 - 50 °C.
Usable pH range:	1 – 13.
Total salts concentration:	< 0.5 M.

4. Caution

1. Nonpolar solvent such as n-hexane, chloroform and toluene can't be used as eluent.

2. Don't store the column under strong acidic condition or strong alkaline condition.

In case the eluent contains chlorine ions, usable pH range is up to 4.0.

3. Don't abruptly change the column pressure or the flow rate while the liquid chromatography is in operation.

4. Don't remove the end fittings from the column. Please note that removal of the end fittings will allow air or other extraneous matters to enter into the column, thereby probably further deterioration will occur.