

# Shodex™



## HPLC Columns

### MANUAL

### Asahipak NH2P-LF

**SHOWA**  
**DENKO**  
EUROPE

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](mailto:support@shodex.de)  
Phone: +49 (0)89 93 99 62 37  
[www.shodex.de](http://www.shodex.de)



# Operation Manual

## Shodex™ Asahipak™ NH2P-LF

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

Shodex Asahipak NH2P-LF column is developed as line-filter for Shodex Asahipak NH2P series. In order to maintain column performance for a longer time and to obtain better reproducibility of chromatograms, please use NH-LF column to remove ingredient in eluent.

### 1. Specifications

Column size:	8.0 i.d. x 75 length (mm)
Connection screw:	Swage lock type (No. 10-32 UNF)
Column material:	SUS 316
In-column solvent:	CH <sub>3</sub> CN / H <sub>2</sub> O = 75 / 25
Maximum flow rate:	4.0 mL/min
Maximum pressure:	10 kgf / cm <sup>2</sup>

### 2. Column installation

- ① Make eluent for NH2P series and pump it to chromatograph without analytical NH2P series.
- ② Install NH2P-LF column between pump and injector with the flow through the column matching the flow direction arrow on the column label.
- ③ After pumping 5 mL of the eluent with the flow rate of 1 mL/min, connect the analytical NH2P series to the outlet of injector.
- ④ Set the flow rate at the range given in the operation manual of the analytical NH2P series and start the pump.

### 3. Column life of NH2P-LF column

In case that the eluent is made from acetonitrile of HPLC grade and purified water, it is possible to flow the eluent up to 5 L.

#### 4. Regeneration

Since NH2P-LF column catches many kinds of ingredient in the eluent, wash the NH2P-LF column with alkaline and acidic solutions for regeneration.

During this regeneration, disconnect analytical NH2P series column.

Pump ①, ②, ③, ④ and ⑤ solutions to the NH2P-LF column in order at the flow rate of 2 mL/min from reversed side of flow direction arrow on the column label.

Pump ⑥ solution to the NH2P-LF column at the flow rate of 2 mL/min from normal side of flow direction arrow.

(Values in brackets mean the volume of washing solution)

- ① Purified water (6 mL)
- ② 0. 1M HClO<sub>4</sub> solution (60 mL)
- ③ Purified water (6 mL)
- ④ 0. 1M NaOH solution (60 mL)
- ⑤ Purified water (10 mL)
- ⑥ Eluent for analytical NH2P series (30 mL)

**Caution!** When HClO<sub>4</sub> solution is mixed with NaOH solution, NaClO<sub>4</sub> is produced in the mixed solution. Since NaClO<sub>4</sub> is combustible and explosive compound, never concentrate or dry the mixed solution.