

Date: 19 January 2021

## Notification of changes in the contents described in HPLC Column Performance Report

Dear Valued Customers,

Thank you for your interest in our products.

We will change the description in the Column Performance Report for our HPLC and LC/MS columns with a particle size of around 2  $\mu\text{m}^*$  and HILIC separation mode columns. All of these changes are only the contents described in the Column Performance Report, and you can use the products as usual due to they do not affect the part that comes in contact with liquid.

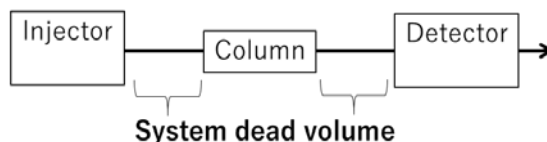
We appreciate your understanding.

\*Columns with a particle size of around 2  $\mu\text{m}$ : 2  $\mu\text{m}$  particle columns and 1.9  $\mu\text{m}$  particle columns

### **[1. Change in the criteria value of theoretical plate number]**

We will replace the UHPLC system for inspection of columns with a particle size of around 2  $\mu\text{m}$ . This change affects the theoretical plate number because of increasing the piping volume before and after the column (System dead volume).

Therefore, we will change the criteria value of theoretical plate number.



New criteria value

Theoretical plate number obtained by subtracting 2,000 from the old criteria value

ex.) 5020-81202 Inertsil ODS-4 2  $\mu\text{m}$  2.1 $\times$ 50 mm

Old criteria value  $\geq 8,000 \Rightarrow$  New criteria value  $\geq 6,000$

- **Target Products:** All HPLC and LC/MS columns with a particle size of around 2  $\mu\text{m}$ .  
(Exclude InertSustain Amide 1.9  $\mu\text{m}$ )

## 【2. Change in solvent ratio of mobile phase】

Due to the above change 1., solvent ratio of mobile phase are optimized for some columns.

Old solvent ratio of mobile phase	CH <sub>3</sub> CN/H <sub>2</sub> O = <a href="#">65/35</a>
New solvent ratio of mobile phase	CH <sub>3</sub> CN/H <sub>2</sub> O = <a href="#">50/50</a>

- **Target Products:** All HPLC and LC/MS columns with the following specifications.
  - \* Particle size is around 2 μm.
  - \* Column length is 50 mm or less ( Exclude InertSustain Amide 1.9 μm )

## 【3. Change in the criteria parameter for HILIC mode separation columns】

For HILIC columns, the theoretical plate number varies greatly depending on the HPLC equipment used, analytical conditions, sample characteristics, etc., depending on the holding characteristics.

Therefore, we will change the criteria parameter to retention time.

Old criteria parameter	Theoretical plate number
New criteria parameter	Retention time

- **Target Products:** All HPLC and LC/MS columns of the following HILIC mode products  
Inertsil HILIC, Inertsil Amide, InertSustain Amid

**Identification:** Issued column performance report under the above changes is written “Rev2.0” in the last line.

Inspector by SHIBATA 2020/12/24 17:09:03  
Product manager NANBA Rev2.0

**Implementation date:** Sequentially implemented from 1<sup>st</sup> April 2021 production



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