

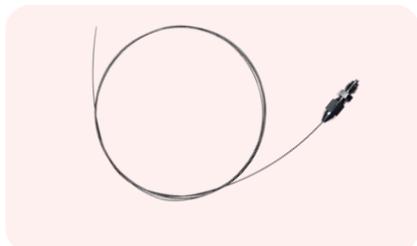
**NEW**

# UA Guard Column Set Ph

*Specifically designed for UA-PBDE column for phthalates analysis*

This set consists of a guard column (UA Guard Column Ph) and a connection union (UA Connector) and is used to connect to the Frontier labs UA-PBDE column for phthalates analysis. Using this product, the contamination of the separation column is minimized, and the frequency of the replacement is reduced.

## Features of UA guard column set Ph



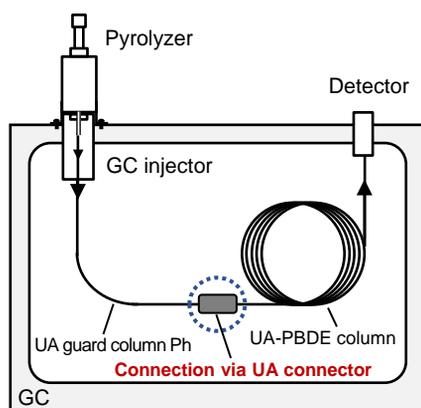
UA guard column Ph and UA connector

**1. Enhances the durability of separation column**

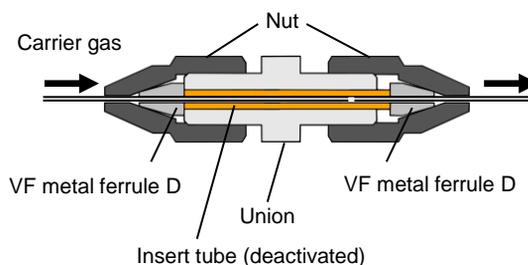
**2. Easy and simple replacement of guard column**

### 【Structure】

The UA guard column is connected to one end of the UA connector and a UA-PBDE column to the other end, using special metal ferrules for sealing.



### Connection via UA connector (enlarged view)



## Specifications (UA guard column Ph)

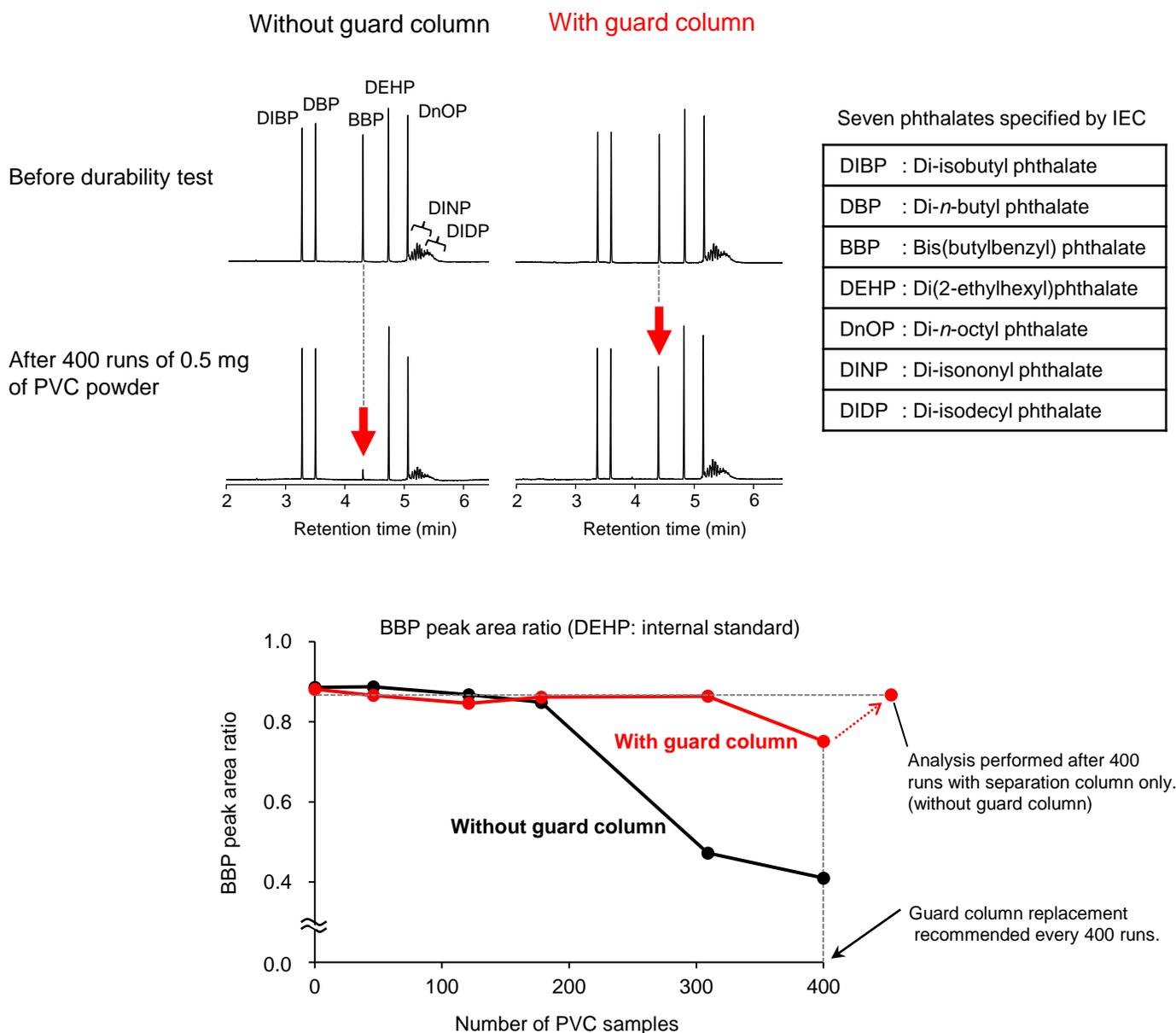
- Designed specifically for phthalates analysis
- Compatible column : UAPBDE-15M-0.05F
- Stationary phase : Dimethylpolysiloxane
- Material : Deactivated stainless steel
- Size : Length 1.5 m, i.d. 0.25 mm, o.d. 0.47 mm, df. 0.1 μm
- Max use temperature : 380 °C

Product name	Product number	Contents
UA Guard Column Set Ph	UAGU-K01	UA guard column Ph (1 ea.), UA connector (1 ea.), VF Metal Ferrule D (3 ea.), and Wrench (6/8 mm, 2 ea.)
UA Guard Column Ph	UAGU-M15	UA guard column (2 ea)
UA Connector	UAGU-K02	UA connector (1 ea)
VF Metal Ferrule D	MS402167	VF metal ferrule D (20 ea)

## UA guard column Ph extends the life of separation column

To demonstrate the effect of the UA guard column Ph on the deterioration of a separation column, a durability test\* was performed by running 400 samples of 0.5 mg each of polyvinyl chloride (PVC) powder. Before and after the durability test, samples containing seven phthalates specified in IEC62321-8 as standard samples were analyzed, and the separation column was evaluated. After the durability test, the peak area of the BBP decreased slightly with the guard column in comparison with that without the guard column. Also, after the durability test, when the guard column was removed and the measurement was performed using only the separation column, the peak area of BBP was restored, indicating that the separation column was protected.

\* The repeated analysis of PVC is one of the harshest conditions for separation columns. The HCl generated by the thermal decomposition of PVC causes significant damage to the stationary phase of the separation column.



**Analytical conditions:** TD: 150 - 320 °C (200 °C/min, 0.5 min), GC Inj.: 300 °C, Carrier: He 1 mL/min, Split ratio: 1/50, GC oven: 80 °C - 320 °C (50 °C/min, 1.2 min), Detector: FID 320 °C, Durability test sample: 0.5 mg of PVC, Standard samples: 0.5 µg each of seven phthalates specified by IEC