

## High-durability semi-micro ODS column

# L-column ODS-L

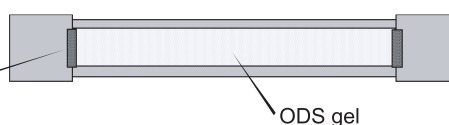
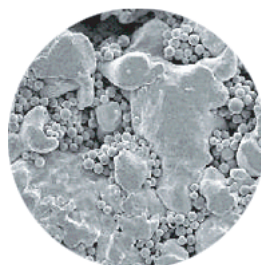
Patent Pending

The use of LC/MS has spread quickly in various fields, such as medical-supplies development, proteome studies, life sciences, and investigational research of endocrine disruptors. A semi-micro column having a diameter is 2.1mm or 1.5mm is used for LC/MS. However, the semi-micro column has such a small cross-sectional area that it can easily get blocked, and it shows poor durability.

L-column ODS-L is a new semi-micro column with a newly developed highly efficient frit and shows significantly superior durability to conventional products.

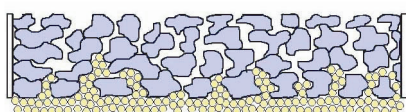
It is the optimal column for use in environmental and pharmacokinetic fields, which require highly sensitive analysis and prolonged stability.

A scanning- electron-  
microscopic photograph of frit



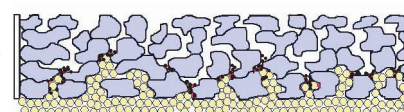
Conventional column

Before use



ODS gel has stopped leaking because it enters the inside of frit and gets blocked in the narrow portion.

After use (Degradation article)

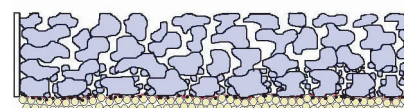


The flow of contaminants and particulate matter is blocked, especially in the portion where ODS gel exists densely.

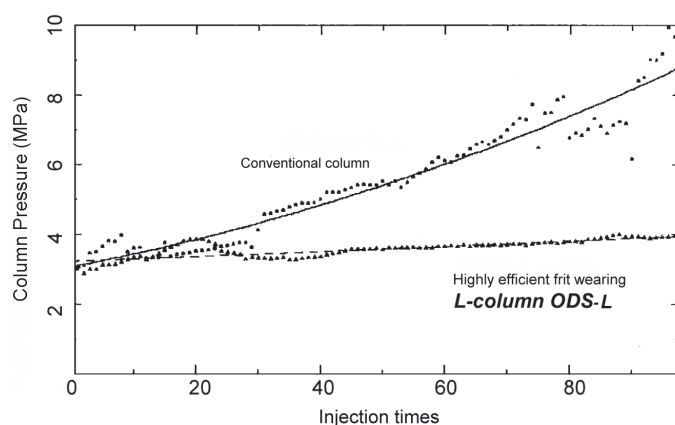
Highly efficient frit wearing  
**L-column ODS-L**



The highly efficient frit is subjected to a special processing, and it has a large hole at the frit entrance and a fine hole at the exit part. Therefore, the ODS gel does not enter the frit



Since contaminants and particulate matter pass the frit and diffuse widely in respect of the ODS gel, this column does not get blocked very easily as compared with the conventional column.



Durability examination result

100 $\mu$ L of powder green tea decoction was injected at a 100 times volume to serve as a monitor of the column pressure.