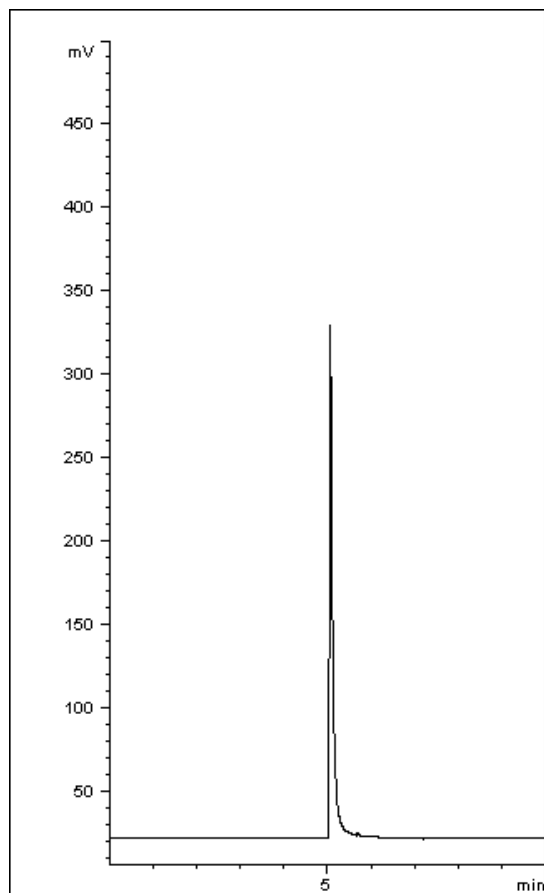
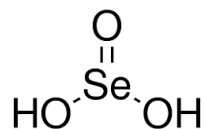


Selenious acid analyzed with HPLC – AppNote

Selenious acid, an inorganic oxide

Traditional Reversed Phase mode may not be a good choice due to the high polarity or hydrophilicity (*Log P*: -1.3) of this inorganic acid. As this compound lacks chromophores it can be difficult to detect using conventional HPLC techniques. Below we demonstrate both good retention and peak shape with this method.





Peak:

Selenious Acid

Method Conditions:

Column: Cogent Diamond Hydride™, 4μm, 100Å.

Catalog No.: 70000-10P

Dimensions: 4.6mm x 100mm

Mobile Phase:

A: DI water / 0.1% formic acid

B: acetonitrile

Gradient:

Time (Minutes)	%B
0	100
2	100
3	50
4	50



5	100
6	100

Injection vol.: 2 μ L

Flow rate: 1.0mL / minute.

Detection: ELSD, Gain: 8, Temperature: 60°C, Nitrogen: 3.5 bar.

Sample Preparation: 1.0mg / mL selenious acid in DI water.

Notes: Selenious acid is an ingredient found in supplements, vitamins, parenteral nutrition, and dandruff shampoo. It also preserves vitamin E, which improves the cell's antioxidant defense, and plays an important role in the structure of teeth. Selenious acid injection is a trace element indicated in adult and pediatric patients as a source of selenium for parenteral nutrition when oral or enteral nutrition is not possible, insufficient, or contraindicated.