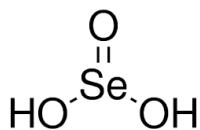
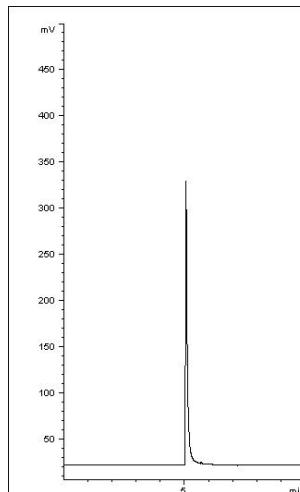




## Selenious Acid Analyzed with HPLC - AppNote

### Selenious acid, an inorganic oxide

Traditional Reversed Phase mode may not be a good choice due to the high polarity or hydrophilicity ( $\text{Log } P: -1.3$ ) 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™, 4 $\mu\text{m}$ , 100 $\text{\AA}$ .

**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 $\mu$ 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.

---



Printed from the Chrom Resource Center

Copyright 2025, All Rights Apply

**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

Tel: (732) 380-8900

Fax: (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)