

Orosil C18

HPLC Columns



Orosil HPLC Stationary Phases

Orosil HPLC stationary phases use high purity silica gel and are designed for the separation of polar, semi-polar, and non-polar compounds at low to medium pH.

Orosil C18-HC

The Orosil C18-HC stationary phase from Orochem Technologies is a high carbon-loaded phase containing 20% carbon, and it is fully endcapped. It is a “work horse” phase designed for the separation of polar, semi-polar, and nonpolar compounds.

Carbon load: 20% | **Endcap:** Yes | **pH Range:** 2-8

Orosil Polar C18

The Orosil Polar C18 stationary phase from Orochem Technologies is a high carbon-loaded phase containing 19% carbon and a proprietary polar endcap. It is designed for those difficult separations of polar and semi-polar compounds and shows superior selectivity of basic compounds. The combination of high carbon-loading and polar endcapping produces a phase that contains high hydrophobicity and polarity and is compatible with 100% aqueous phases.

Carbon load: 19% | **Endcap:** Yes | **pH Range:** 2-9

Orosil C18-ER

The Orosil C18-ER stationary phase (extended range) is prepared using a sterically-hindered C18 group chemically bonded to high-purity silica gel. It is designed for use with lower pH mobile phases, and its increased stability results in longer column life and better resistance to aggressive mobile phases. The Orosil C18-ER phase is compatible with 100% aqueous phases and is designed for the separation of acidic, neutral, and basic analytes.

Carbon load: 20% | **Endcap:** No | **pH range:** 1.5-8

Orosil C18

The Orosil C18 stationary phase is a moderately high carbon-loaded phase containing 17% carbon, and it is fully endcapped. It is a good, all-purpose C18 phase and shows excellent organic base selectivity. This column is recommend in the USP draft method for azacytidine analysis.

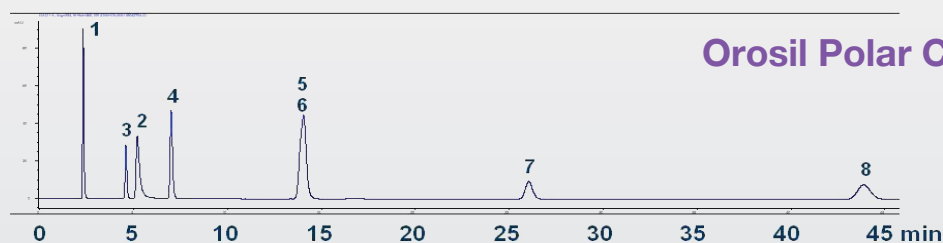
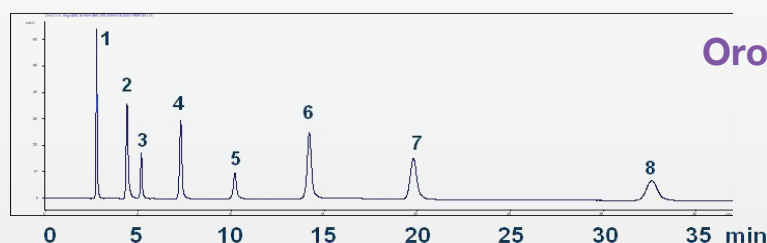
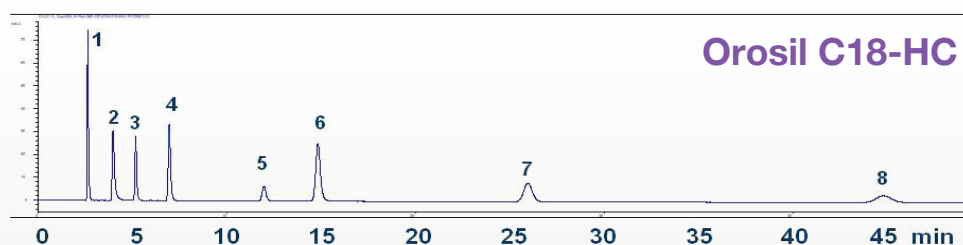
Carbon load: 17% (C18), 12% (C8) | **Endcap:** Yes | **pH Range:** 2.5-8

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Selectivity Test Comparisons (Modified C18)



Components

1. Uracil 2. Pyridine 3. Phenol 4. Dimethyl Phthalate 5. N,N-Dimethylaniline
6. 4-Ethylbenzoic Acid 7. Toluene 8. Ethylbenzene.

Specifications and HPLC Conditions

4.6x150 mm, 3 micron column | 25°C, UV at 254 nm | Mobile phase isocratic,
60/40 methanol/20 mM KH₂PO₄, pH 3.2 | Flow rate is 0.6 mL/min | Injection volume is 2 µL.