

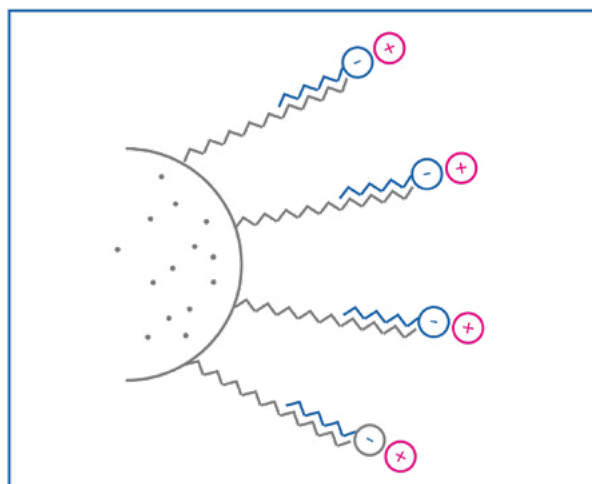
## Ion pair chromatography reagents

Ion pair chromatography is used **to separate ionic analytes on a reversed phase column in HPLC**. This chromatography is based on the **addition of ionic compounds** (Ion Pair reagents) to the mobile phase to promote the formation of ion pairs with ionic analytes in the sample to modulate retention of ionic analytes themselves.

The increase in hydrophobic character of the ion pair (electrically neutral) results in a greater affinity for the reverse stationary phase and leads to an increase of sample resolution.

UV detectors are widely used. Therefore ion-pair reagents **must lack UV absorption themselves** to obtain highly sensitive detection of samples. The UV absorption of sodium alkanesulfonates and quaternary ammonium salts is minimal so that these reagents can be used for reliable HPLC analysis.

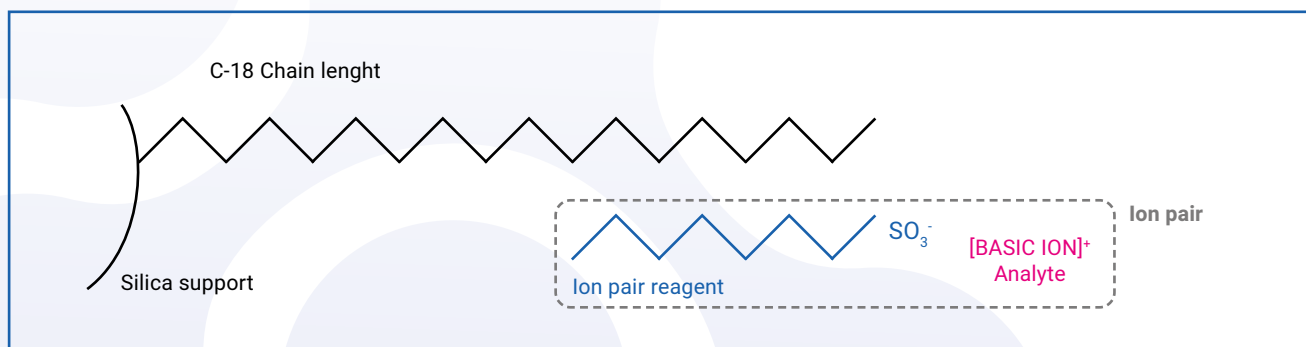
The purity of mobile phase additives is of utmost importance to their successful application.



### Main advantages

All our Ion Pair reagents are **rigorously controlled** with special emphasis on the requirements of modern reversed phase HPLC:

- High purity
- UV and IR transparency

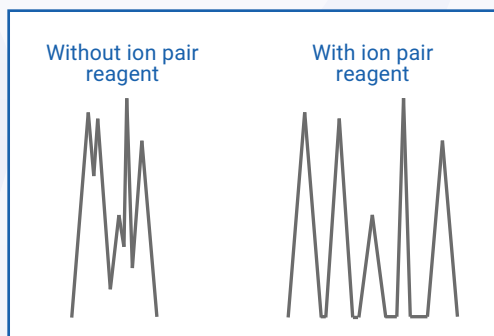


Interaction between ion pair reagent and C-18 chain support



In a regular reversed-phase chromatography system the analyte is incapable of making significant interactions with the non-polar surface of the stationary phase and hence elutes out immediately without much retention with little or no resolution observed.

In reversed-phase ion-pairing chromatography the analyte is present in a mobile phase containing a suitable ion-pairing agent. The agent forms an ion-pair via ionic interactions with the analyte to make it more non-polar. As a result the analyte gets more retained on the stationary phase and elutes out more gradually.



Representation of the improvement of a chromatogram using ion pair reagent (right) and without ion pair reagent (left).

Product code	Product name	Assay min.	CAS number	Pack sizes
367127.1606	1-Decane Sulfonic Acid Sodium Salt	99.0 %	13419-61-9	25 g
367127.1609				250 g
364897.1606	1-Heptane Sulfonic Acid Sodium Salt	99.0 %	22767-50-6	25 g
364897.1608				100 g
367128.1606	1-Heptane Sulfonic Acid Sodium Salt 1-hydrate	99.0 %	207300-90-1	25 g
363428.1606	1-Hexane Sulfonic Acid Sodium Salt	99.0 %	2832-45-3	25 g
363428.1608				100 g
367129.1606	1-Hexane Sulfonic Acid Sodium Salt 1-hydrate	99.0 %	207300-91-2	25 g
363995.1606	1-Octane Sulfonic Acid Sodium Salt	99.0 %	5324-84-5	25 g
363995.1608				100 g
364896.1606	1-Pentane Sulfonic Acid Sodium Salt	99.0 %	22767-49-3	25 g
367038.1606	Tetrabutylammonium di-Hydrogen Phosphate	99.0 %	5574-97-0	25 g
363622.1606	Tetrabutylammonium Hydrogen Sulfate	99.0 %	32503-27-8	25 g
363622.1607				50 g
363622.1610				500 g

