PureSynth®
Research Chemicals GmbH

# PurSolv Hyper HPLC Solvents
# PurChrom Hyper HPLC Buffers & Ion-Pair Reagents

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# PurSolv Hyper

At PureSynth, we introduce PurSolv Hyper — a superior line of HPLC solvents developed to exceed industry standards and provide reliable, high-performance results for your chromatography needs. With an emphasis on purity and consistency, PurSolv Hyper is the ideal choice for analytical and preparative HPLC applications.

**Key Features:**

- **High Purity:** Ensures minimal interference and background noise, leading to accurate, reproducible results.
- **Low UV Absorbance:** Optimized for UV detection, allowing clear, precise peak identification.
- **Gradient Grade Available:** Ideal for complex separations, supporting both isocratic and gradient elution techniques.
- **Consistent Quality:** Stringent quality control measures ensure batch-to-batch consistency.
- **Extended Shelf Life:** Carefully packaged to maintain stability and prolong usability.
- **Low Residue on Evaporation:** Reduces interference in trace analysis, maintaining the integrity of your results.

PurSolv Hyper is crafted for precision, reliability, and efficiency, making it the solvent of choice for professionals across the pharmaceutical, environmental, and food testing industries.

*Enhance Your Peak Sharpness*

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# PurSolv Hyper HPLC Solvents

| Product No. | Description | CAS No. | Packing |
|---|---|---|---|
| PSR44248 | Acetone PurSolv Hyper for HPLC, ≥99.9% | 67-64-1 | 1L, 2.5L |
| PSR36298 | Acetonitrile PurSolv Hyper, Gradient grade, for HPLC, ≥99.9% | 75-05-8 | 1L, 2.5L, 4L |
| PSR37732 | Acetonitrile PurSolv Hyper, Super Gradient grade for HPLC, ≥99.95% | 75-05-8 | 4L |
| PSR37402 | Benzene PurSolv Hyper for HPLC, ≥99.9% | 71-43-2 | 1L, 2.5L |
| PSR39045 | Benzyl Alcohol PurSolv Hyper for HPLC, ≥99.5% | 100-51-6 | 1 L |
| PSR45081 | 1-Butanol PurSolv Hyper for HPLC, ≥99.7% | 71-36-3 | 1 L |
| PSR40059 | Butylamine PurSolv Hyper for HPLC, ≥99.0% | 109-73-9 | 1L, 2.5L |
| PSR40753 | tert-Butyl Alcohol PurSolv Hyper for HPLC, ≥99.5% | 75-65-0 | 1L, 2.5L |
| PSR42946 | tert-Butyl Methyl Ether PurSolv Hyper for HPLC, ≥99.8% | 1634-04-4 | 1L, 2.5L |
| PSR39686 | Carbon tetrachloride PurSolv Hyper for HPLC, ≥99.9% | 56-23-5 | 1L, 2.5L |
| PSR40809 | Chloroform PurSolv Hyper for HPLC, Contains Amylene as stabilizer, ≥99.9% | 67-66-3 | 1 L |
| PSR45085 | Chloroform PurSolv Hyper for HPLC, Contains 0.5-1.0% ethanol as stabilizer, ≥99.9% | 67-66-3 | 1 L |
| PSR44941 | Cyclohexane PurSolv Hyper for HPLC, ≥99.7% | 110-82-7 | 1L, 2.5L |
| PSR37655 | Decane PurSolv Hyper for HPLC, ≥99.0% | 124-18-5 | 1L, 2.5L |
| PSR37589 | Dichloromethane PurSolv Hyper for HPLC (Stabilized with amylene), ≥ 99.8% | 75-09-2 | 1L, 2.5L |
| PSR44245 | N,N Dimethyl formamide PurSolv Hyper for HPLC, ≥99.9% | 68-12-2 | 1L |
| PSR43448 | Dimethyl sulfoxide PurSolv Hyper for HPLC, ≥99.7% | 67-68-5 | 1L, 2.5L |
| PSR37660 | Ethyl acetate PurSolv Hyper for HPLC, ≥99.7% | 141-78-6 | 1L, 2.5L |
| PSR39714 | Ethyl methyl ketone PurSolv Hyper for HPLC, ≥ 99.0 % | 78-93-3 | 1L, 2.5L |
| PSR43078 | n-Heptane PurSolv Hyper for HPLC, ≥99.0% | 142-82-5 | 1L |
| PSR37828 | n-Hexane PurSolv Hyper for HPLC, ≥97.0% | 110-54-3 | 1L, 2.5L |
| PSR48615 | Isohexane (2-Methylpentane) PurSolv Hyper for HPLC, ≥99.0% | 107-83-5 | 1 L |
| PSR36686 | Isopropyl alcohol PurSolv Hyper for HPLC, ≥99.9 % | 67-63-0 | 1 L |
| PSR44292 | Isopropyl alcohol PurSolv Hyper for HPLC, ≥99.0 % | 67-63-0 | 1L, 2.5L |
| PSR36299 | Methanol PurSolv Hyper gradient grade for HPLC, ≥99.9% | 67-56-1 | 1L, 2.5L, 4L |
| PSR37049 | Methanol PurSolv Hyper, Super Gradient grade for HPLC, ≥99.95% | 67-56-1 | 2.5L |
| PSR44462 | Methyl Cyclohexane PurSolv Hyper for HPLC, >99.0% | 108-87-2 | 1L, 2.5L |
| PSR40119 | Methyl Isobutyl Ketone PurSolv Hyper for HPLC, >99.5% | 108-10-1 | 1L, 2.5L |
| PSR47175 | 2-Methyl-1-propanol PurSolv Hyper for HPLC, 99.5% | 78-83-1 | 1L, 2.5L |
| PSR9571 | 1-Methyl-2-pyrrolidinone PurSolv Hyper for HPLC, ≥99% | 872-50-4 | 1L, 2.5L, 4L |
| PSR37656 | Nonane PurSolv Hyper for HPLC, ≥99.0% | 111-84-2 | 100ML |
| PSR37657 | Octane PurSolv Hyper for HPLC, ≥98.0% | 111-65-9 | 1L, 2.5L |
| PSR44312 | 1-Octanol PurSolv Hyper for HPLC, ≥99.0% | 111-87-5 | 1L, 2.5L |
| PSR43188 | Pentane PurSolv Hyper for HPLC, ≥99.0% | 109-66-0 | 500ML, 1L, 2.5L |
| PSR41656 | 1-Pentanol PurSolv Hyper for HPLC,≥99.0% | 71-41-0 | 1L, 2.5L |
| PSR37147 | 1-Propanol PurSolv Hyper for HPLC, ≥99.0 % | 71-23-8 | 1L, 2.5L |
| PSR41611 | Propionic acid PurSolv Hyper for HPLC, >99.0% | 79-09-4 | 100ML |
| PSR44986 | Pyridine PurSolv Hyper for HPLC, ≥99.9% | 110-86-1 | 1 L |
| PSR36660 | Tetrahydrofuran PurSolv Hyper for HPLC, inhibitor-free, ≥99.9% | 109-99-9 | 1 L |
| PSR49867 | Tetrahydrofuran PurSolv Hyper for HPLC, Contains 75 - 400 ppm BHT as Stabilizer | 109-99-9 | 1 L |
| PSR38076 | Toluene PurSolv Hyper for HPLC, ≥99.9% | 108-88-3 | 1L, 2.5L |
| PSR37654 | Undecane PurSolv Hyper for HPLC, ≥99.0% | 1120-21-4 | 1L, 2.5L |
| PSR20710 | Water PurSolv Hyper for HPLC | 7732-18-5 | 1L, 2.5L, 4L |
| PSR44400 | o-Xylene PurSolv Hyper for HPLC, ≥98.0% | 95-47-6 | 1L, 2.5L |

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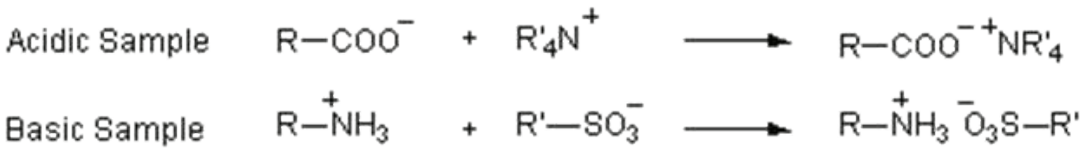
# PurChrom Hyper – Ion-Pair Reagents & Buffers for HPLC

PurChrom is a premium line of high-purity ion-pair reagents and buffers specially formulated for HPLC and Ion Chromatography. Designed to meet the rigorous demands of analytical labs, PurChrom products ensure consistent retention, peak shape, and resolution across a wide range of analytes.

**The Science Behind Ion-Pair Reagents:**

In reversed-phase HPLC and ion chromatography, ionic and highly polar analytes often exhibit poor retention and peak shape due to their limited interaction with non-polar stationary phases. Ion-pair reagents solve this challenge by forming temporary, neutral complexes with these analytes, enhancing retention and resolution.

Ion-pair reagents (also called pairing agents) are charged molecules that interact electrostatically with oppositely charged analytes. This interaction creates a hydrophobic ion-pair complex that is more readily retained on a hydrophobic (C18 or similar) stationary phase.




Once paired, these complexes behave like neutral or weakly polar species, allowing for:

- Improved retention times
- Reduced tailing
- Sharper peak shapes
- Enhanced reproducibility

# PurChrom Hyper - Driving Precision in Chromatographic Analysis

From pharmaceutical development to environmental analysis, reproducibility and sensitivity are non-negotiable. Our **Ion-Pair Reagents and Buffers** are designed for high-performance ion chromatography and reversed-phase HPLC.

These products are tested as per UV transmittance, insoluble matter, interfering metals and other product specific tests.

**Applications:**

- Pharmaceuticals & APIs
- Food & Beverage Analysis
- Water & Environmental Testing
- Biological & Clinical Research
- Industrial QC
- Forensic Research

## Targeted Retention. Cleaner Separations.

In the example below, standard conditions fail to retain this acidic molecule, resulting in poor separation and early elution. By introducing **PurChrom Hyper's ion-pair reagent (tetrabutylammonium hydrogen sulfate),** retention is dramatically improved through the formation of a hydrophobic ion-pair complex. Neutral molecules such as benzaldehyde and acetophenone remain unaffected, proving the selectivity and precision of ion-pairing chemistry.

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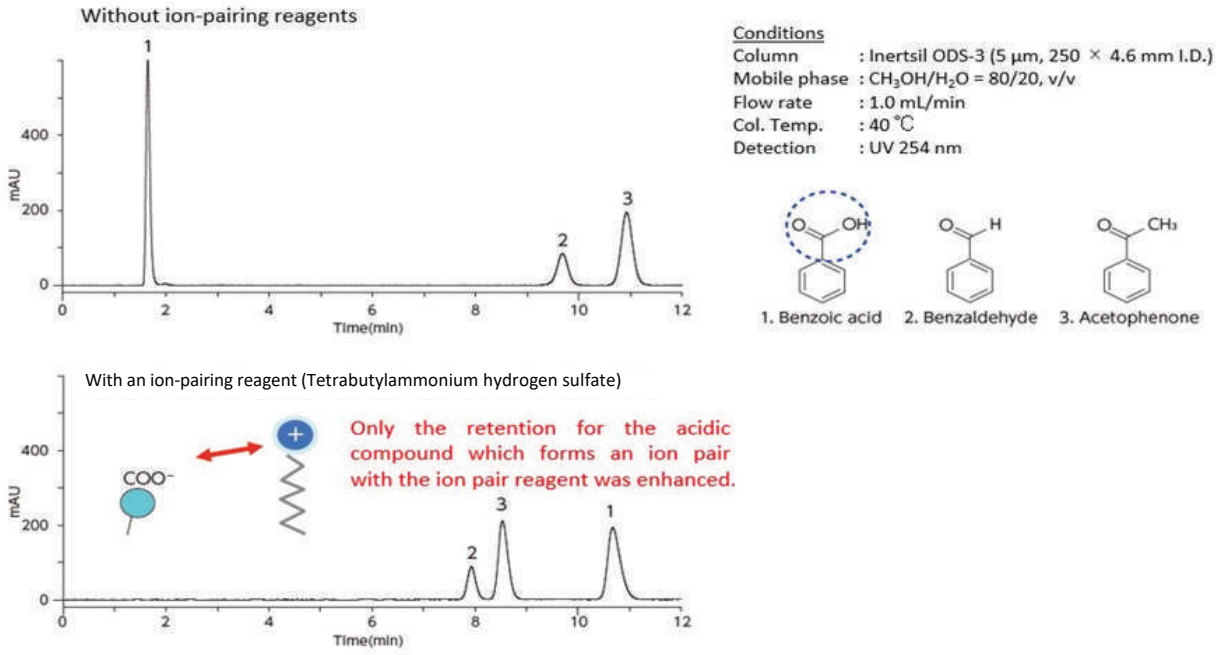


Figure 1: Enhanced retention for benzoic acid using an ion-pair reagent

***With PurChrom Hyper , you don't just separate — you control retention behaviour with purpose.***

## We Offer:

- High-purity ion-pair reagents
- Buffer concentrates & ready-to-use buffer solutions
- Custom formulations on request
- Compatibility with reversed-phase HPLC and ion chromatography
- Optimized solubility and pH stability

*Enhance Your Peak Sharpness*

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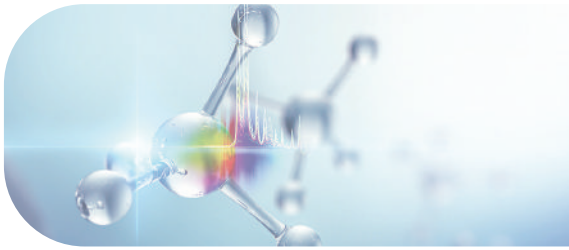
# PurChrom Hyper - HPLC Buffers

| Product No. | Description | Cas No. | Packing |
|---|---|---|---|
| PSR42185 | Ammonium acetate PurChrom Hyper for HPLC, ≥99.0% | 631-61-8 | 50G, 250G |
| PSR46475 | Ammonium bicarbonate PurChrom Hyper for HPLC, ≥99.0% | 1066-33-7 | 100G |
| PSR43648 | Ammonium formate PurChrom Hyper for HPLC, ≥99.0% | 540-69-2 | 50G, 250G |
| PSR36659 | Ammonium phosphate monobasic PurChrom Hyper for HPLC, ≥99.0% (T) | 7722-76-1 | 250G |
| PSR36655 | Ammonium trifluoroacetate PurChrom Hyper for HPLC, ≥99.0% | 3336-58-1 | 10G, 50G |
| PSR46513 | Ammonium trifluoroacetate, Suitable for HPLC, 99.0–101.0% | 3336-58-1 | 10G, 50G |
| PSR43551 | Ethylenediaminetetraacetic acid (EDTA) disodium salt dihydrate PurChrom Hyper for HPLC, ≥99.0% | 6381-92-6 | 10G, 500G |
| PSR36809 | Formic acid PurChrom Hyper for HPLC, ≥ 99.5% | 64-18-6 | 100ML |
| PSR44973 | Ortho phosphoric acid PurChrom Hyper for HPLC, 85-90% | 7664-38-2 | 100ML, 500ML |
| PSR22190 | Potassium Hydrogen Phthalate PurChrom Hyper for HPLC, ≥99.5% | 877-24-7 | 50G, 250G |
| PSR40702 | Potassium phosphate monobasic PurChrom Hyper for HPLC, ≥99.5% | 7778-77-0 | 50G, 250G, 1KG |
| PSR36912 | Sodium formate PurChrom Hyper for HPLC, ≥99% | 141-53-7 | 50G, 250G |
| PSR40772 | Sodium perchlorate monohydrate PurChrom Hyper for HPLC, ≥99% | 7791-07-3 | 50G, 250G |
| PSR62 | Di-Sodium Hydrogen Phosphate Dihydrate, PurChrom Hyper For HPLC, ≥99% | 10028-24-7 | 500G |
| PSR36658 | Sodium phosphate monobasic PurChrom Hyper for HPLC, ≥99.0% | 7558-80-7 | 50G, 250G |
| PSR48688 | Tetrabutylammonium hydrogen sulfate PurChrom Hyper for HPLC, ≥99.5% | 32503-27-8 | 50G |
| PSR36810 | Trifluoroacetic acid PurChrom Hyper for HPLC, ≥99.5% | 76-05-1 | 10*1ML, 100ML |

# PurChrom Hyper - Ion Pair Reagents

| Product No. | Description | Cas No. | Packing |
|---|---|---|---|
| PSR38255 | Sodium methanesulfonate PurChrom Hyper for Ion Pair Chromatography, ≥98% | 2386-57-4 | 25G |
| PSR42681 | Sodium butane-1-sulfonate PurChrom Hyper for Ion Pair Chromatography, ≥99% | 2386-54-1 | 25G |
| PSR42177 | Sodium pentane-1-sulfonate PurChrom Hyper for Ion Pair Chromatography, >99% | 22767-49-3 | 25G |
| PSR49153 | Sodium pentane-1-sulfonate monohydrate PurChrom Hyper for Ion Pair Chromatography, >99% | 207605-40-1 | 25G |
| PSR39465 | 1-Hexanesulfonic acid sodium salt anhydrous PurChrom Hyper for Ion Pair Chromatography, ≥99% | 2832-45-3 | 25G |
| PSR39466 | 1-Hexanesulfonic acid sodium salt monohydrate PurChrom Hyper for Ion Pair Chromatography, ≥99% | 207300-91-2 | 25G |
| PSR40415 | Sodium 1-heptanesulfonate PurChrom Hyper for Ion-Pair Chromatography, ≥98% | 22767-50-6 | 25G |
| PSR39461 | Sodium 1-heptanesulfonate monohydrate PurChrom Hyper for Ion Pair Chromatography, ≥98% | 207300-90-1 | 25G |
| PSR42169 | Sodium 1-octanesulfonate PurChrom Hyper for Ion-Pair Chromatography, ≥99% | 5324-84-5 | 25G |
| PSR43369 | Sodium 1-octanesulfonate monohydrate PurChrom Hyper for Ion Pair Chromatography, ≥99% | 207596-29-0 | 25G |
| PSR11599 | Sodium 1-nonanesulfonate PurChrom Hyper For Ion-Pair Chromatography, ≥98% | 35192-74-6 | 25G |
| PSR38269 | Sodium 1-decanesulfonate anhydrous PurChrom Hyper for Ion Pair Chromatography, ≥99% | 13419-61-9 | 50G |
| PSR50462 | Hexan-1-amine Acetate (2.0 mol/L in Water), PurChrom Hyper for HPLC [Ion-pairing reagent] | 23239-72-7 | 100G |
| PSR10893 | Tetrabutylammonium hydrogen sulfate PurChrom Hyper for Ion Pair Chromatography, >98% | 32503-27-8 | 25G |
| PSR50196 | Tetrabutylammonium hydrogen sulfate PurChrom Hyper for Ion Pair Chromatography, ≥99.5% | 32503-27-8 | 25G, 50G |
| PSR49348 | Triethylammonium Acetate (2.0 mol/L in Water) PurChrom Hyper for HPLC [Ion-pairing reagent] | 5204-74-0 | 100ML |
| PSR37886 | Tetraheptylammonium bromide, PurChrom Hyper for Ion Pair Chromatography ≥99.0% | 4368-51-8 | 25G |
| PSR40086 | Tetrahexylammonium Bromide PurChrom Hyper for Ion Pair Chromatography, >98% | 4328-13-6 | 25G |
| PSR42049 | Tetrakis(decyl)ammonium bromide PurChrom Hyper for Ion Pair Chromatography ≥99% | 14937-42-9 | 25G |
| PSR40140 | Tetramethylammonium bisulfate PurChrom Hyper for Ion Pair Chromatography, ≥99% | 80526-82-5 | 25G |
| PSR37842 | Tetraethyl ammonium hydrogen Sulfate PurChrom Hyper for Ion Pair Chromatography, ≥99% | 16873-13-5 | 5G, 25G |



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