PureSynth®
Research Chemicals GmbH

PurSolv Hyper HPLC Solvents
PurChrom 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
PSR49180	Acetonitrile PurSolv Hyper for HPLC, ≥99.9%	75-05-8	1L, 2.5L, 4L
PSR36298	Acetonitrile PurSolv Hyper, Gradient grade, for HPLC, ≥99.9%	75-05-8	1L, 2.5L, 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
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
PSR44137	Dibutylamine PurSolv Hyper for HPLC, ≥99.0%	111-92-2	100ML
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
PSR41570	Ethyl acetate PurSolv Hyper for HPLC and residue analysis, ≥99.9% (GC)	141-78-6	1L, 2.5L
PSR39714	Ethyl methyl ketone PurSolv Hyper for HPLC, ≥ 99.0 %	78-93-3	1L, 2.5L
PSR36809	Formic acid PurSolv Hyper for HPLC, ≥ 99.5%	64-18-6	100ML
PSR43078	n-Heptane PurSolv Hyper for HPLC, ≥99.0%	142-82-5	1L, 2.5L
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
PSR40319	2-Mercaptoethanol PurSolv Hyper for HPLC, ≥99.0 %	60-24-2	1L, 2.5L
PSR49183	Methanol PurSolv Hyper for HPLC, ≥99.9%	67-56-1	1L, 2.5L, 4L
PSR36299	Methanol PurSolv Hyper gradient grade for HPLC, ≥99.9%	67-56-1	1L, 2.5L, 4L
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	1L, 2.5L
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	1L, 2.5L
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	1L, 2.5L, 4L
PSR49867	Tetrahydrofuran PurSolv Hyper for HPLC, Contains 75 - 400 ppm BHT as Stabilizer	109-99-9	1 L
PSR36810	Trifluoroacetic acid PurSolv Hyper for HPLC, ≥99.0%	76-05-1	100ML
PSR37321	N,N,N',N'-Tetramethyl ethylenediamine, PurSolv Hyper for HPLC,≥ 99.0%	110-18-9	25ML
PSR40849	1,2,4-Trichlorobenzene PurSolv Hyper for HPLC, ≥99.0%	120-82-1	1L, 2.5L
PSR18192	2,2,4-Trimethylpentane PurSolv Hyper for HPLC, ≥99%	540-84-1	1L, 2.5L
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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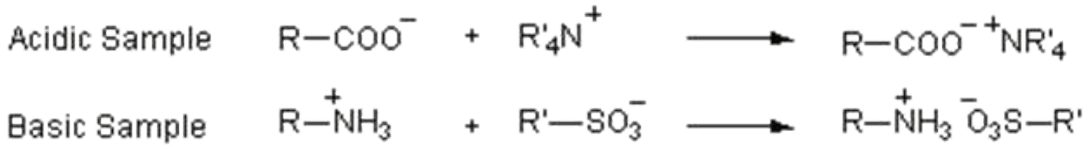
PurChrom – Ion-Pair Reagents & Buffers for HPLC

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

Enhance Your Peak Sharpness

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PurChrom - 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'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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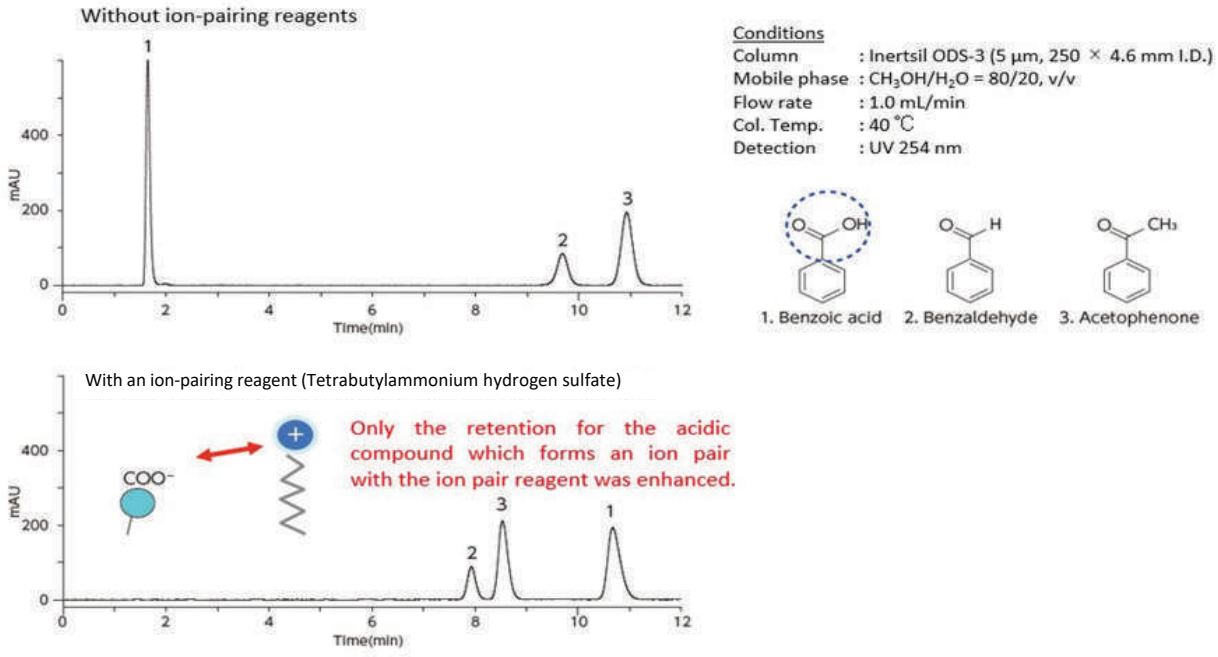

Figure 1: Enhanced retention for benzoic acid using an ion-pair reagent

With PurChrom, 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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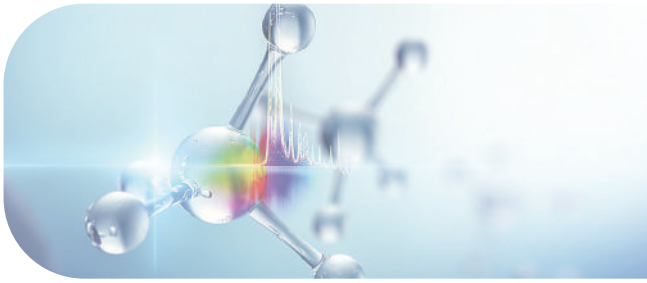
PurChrom - HPLC Buffers

Product No.	Description	Cas No.	Packing
PSR42185	Ammonium acetate PurChrom for HPLC, ≥99.0%	631-61-8	50G, 250G
PSR46475	Ammonium bicarbonate PurChrom for HPLC, ≥99.0%	1066-33-7	100G
PSR43648	Ammonium formate PurChrom for HPLC, ≥99.0%	540-69-2	50G
PSR36659	Ammonium phosphate monobasic PurChrom for HPLC, ≥99.0% (T)	7722-76-1	250G
PSR36655	Ammonium trifluoroacetate PurChrom 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 for HPLC, ≥99.0%	6381-92-6	10G, 500G
PSR50397	Hexadecyltrimethylammonium Chloride PurChrom for HPLC, ≥97.0 %	112-02-7	100G
PSR44973	Ortho phosphoric acid PurChrom for HPLC, 85-90%	7664-38-2	100ML
PSR50498	Perchloric Acid PurChrom for HPLC, ≥70.0%	7601-90-3	100ML
PSR22190	Potassium Hydrogen Phthalate PurChrom for HPLC, ≥99.5%	877-24-7	50G, 250G
PSR40702	Potassium phosphate monobasic PurChrom for HPLC, ≥99.5%	7778-77-0	50G, 250G, 1KG
PSR36912	Sodium formate PurChrom for HPLC, ≥99%	141-53-7	50G, 250G
PSR40772	Sodium perchlorate monohydrate PurChrom for HPLC, ≥99%	7791-07-3	50G, 250G
PSR62	Di-Sodium Hydrogen Phosphate Dihydrate, Purchrom For HPLC, ≥99%	10028-24-7	500G
PSR36658	Sodium phosphate monobasic PurChrom for HPLC, ≥99.0%	7558-80-7	50G, 250G
PSR48688	Tetrabutylammonium hydrogen sulfate PurChrom for HPLC, ≥99.5%	32503-27-8	50G
PSR50768	Sodium metabisulfite PurChrom for HPLC, ≥98.0%	7681-57-4	500G

PurChrom - Ion Pair Reagents

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



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