

Polypropylene Autosampler Vials and Inserts for LCMS Different from those of Other Manufacturers - Tech Information

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Our polypropylene (PP) autosampler vials and inserts are engineered specifically for LC-MS workflows using an “ultra-virgin” polypropylene formulation.

This proprietary polymer is selected and processed to be **free of extractables** that can elevate baseline noise or introduce spurious ions—issues that can compromise sensitivity, quantitation limits, and long-term system cleanliness in mass spectrometry. Unlike some commodity PP parts, the resin is not recycled and not re-processed, which helps maintain a consistently clean baseline across batches.

In many mass-spec labs, unexpected chemical background originates from auxiliary additives often used in plastics manufacturing—mold-release agents, clarifiers, and antioxidants. These additives speed demolding, improve appearance, or stabilize the polymer, but they can leach into samples, producing ghost peaks, contaminant adducts, and drifting baselines. By avoiding these additives in our “ultra-virgin” PP and optimizing molding conditions, we reduce the risk of carryover and enhance reproducibility for low-abundance analytes.

For LC-MS users, cleaner consumables translate into practical benefits:

- Lower background and improved signal-to-noise, aiding trace-level detection.
- Greater method robustness, with fewer surprises from plastic-derived leachables during validation or routine use.
- Consistency lot-to-lot, supporting regulated environments where baseline stability and data integrity are critical.

In short, our PP vials and inserts are built to MS-first standards—prioritizing chemical cleanliness and reproducibility—so you can focus on your analytes rather than your plastics .





AUTOSAMPLER VIALS AND CAPS

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