

## Substitute for the Waters Total Recovery Autosampler Vial - Tech Information

*Date: 10-NOVEMBER-2023 Last Updated: 2-FEBRUARY-2026*

The **Waters® Total Recovery Vial** is a proprietary, exclusive product of Waters Corporation and has unique design features intended for autosamplers that use **side-port injection needles**. While we cannot offer that exact vial, we do provide a high-performance alternative designed for the same autosampler platforms in most situations.

### Our Alternative: MICROSOLV™ MRQ™ Vials

MICROSOLV's **MRQ™** vials were engineered to function in the same autosamplers that accept the Waters Total Recovery Vial, but with important design differences to match different needle geometries.



Click [HERE](#) to view more details on the MRQ vials.

### Key Differences to Understand

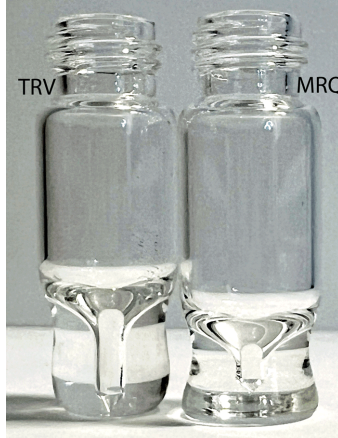
- **Needle Compatibility**
  - Waters Total Recovery Vials are intended for autosamplers that use a side-port injection needle.
  - MRQ™ vials are optimized for autosamplers with bottom-port or bottom-inlet needles.
- **Volume & Headspace**
  - MRQ™ vials hold slightly more total volume and provide additional headspace, which can be beneficial for certain sample prep conditions.
- **Recovery Well Design**
  - Both vial types feature a recovery well, but the geometries differ:
    - MRQ™: smaller bottom well, designed for stability.
    - Waters TRV: longer, deeper well that extends lower in the vial.
- **Dimensions**

- Both vials share the same 12 × 32 mm external dimensions and 9-425 screw threads, so they fit identically into standard autosampler trays.

- **Base Stability**

- MRQ™ vials include a wider base platform, improving stability in racks and trays without affecting instrument compatibility.

*Below is a "rough" photograph for comparison purposes only, of both the Total Recovery Vial (TRV) and an MRQ Vial. Note that the MRQ Vial has a larger total volume and a smaller bottom well. The TRV has a longer well and terminates much lower in the vial than the MRQ.*



If your autosampler uses a side-port needle, you must use the Waters Total Recovery Vial, as it is uniquely designed for that mechanism.

If your autosampler uses a bottom-inlet needle, the MICROSOLV™ MRQ™ vial is an excellent, high-performance choice that fits seamlessly into the same platforms while offering greater volume and stability.

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For detailed specifications or assistance selecting the correct vial for your autosampler, contact our technical team — we're always glad to help.

## AUTOSAMPLER VIALS AND CAPS

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