

## Centrifugation Compatibility of the U-2D Micro-Sample Management System – Tech Information

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The U-2D™ Micro-Sample Management System is widely used for sample preparation, micro-volume storage, and direct autosampler injection workflows. Because many laboratories also incorporate centrifugation steps—either to pellet particulates, clear solutions, or support filtration—it is important to understand how the U-2D system behaves under centrifugal force.

### Compatibility with Centrifugation

Yes, the U-2D™ system **can be centrifuged**, provided that the rack is properly nested inside the Base. When used together, the Base and Rack function similarly to a conventional ANSI-format 96-well microtiter plate, ensuring balanced support and structural stability during rotation.

### Verified Centrifugation Limits

The U-2D system has been tested and confirmed to operate normally at speeds up to:

- **2,500 × g**

This threshold supports a wide range of standard centrifugation applications, such as:

- Light particulate sedimentation
- Clarification of sample solutions
- Pre-analysis cleanup steps

Users should always ensure that the centrifuge hardware (plate carriers, adapters, or swinging-bucket rotors) is compatible with the U-2D's plate height and footprint.

### Operational Considerations

To maintain performance and avoid damage:

- **Always nest the Rack and Base together** before centrifugation. This ensures uniform force distribution across the insert matrix.
- Avoid exceeding 2,500 × g, as higher forces have not been validated and may stress the system.
- Confirm that the centrifuge's plate adapter provides full support beneath the U-2D assembly.
- If using filtration or SPE plates stacked above the U-2D system, ensure they do not transfer mechanical load, which may cause anomalies or failure.

### Practical Applications

Centrifugation compatibility makes the U-2D system suitable for:

- High-throughput sample prep workflows
- Pre-LC/MS cleanup
- Micro-volume solvent exchange
- Clarifying samples prior to autosampler injection

This capability enhances the U-2D system's utility as a flexible micro-sample preparation and management platform.

Click [HERE](#) for U-2D Micro-Sample Management System ordering information and pictures



**U-2D™ 96 Well Plates**  
MICROSOLV

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