

Method Setup Quick Start Guide

Agilent 850-DS Dissolution Sampling Station

Optimize your dissolution sampling

The Agilent 850-DS Dissolution Sampling Station incorporates seamlessly into your existing workflow to provide an unattended sampling and cleaning solution that increases productivity and eliminates variability.

Supporting a range of dissolution methods, the 850-DS works with USP dissolution apparatus 1, 2, 3, 5, 6, and 7 for precise and repeatable results using conventional test tubes, HPLC vials, or 96-well plates.



For further method setup assistance, contact Agilent at: dissolution.hotline@agilent.com

| Key Parameters | Description | Importance | Guidance | Min. * | Typical | Max. * |
|---|---|--|---|--|------------------|-----------|
| Prime Volume | Volume to prime the lines prior to pulling a sample | Helps overcome absorption on filters and dilution in sampling lines, ensuring that lines are full prior to pulling sample | Method/product-specific parameter: should be adjusted/optimized accordingly | 4 mL | 10 mL | 25 mL |
| Purge Volume | Volume to purge sample lines once sample collection has completed | Ensures lines are emptied of current sample before pulling the next; stops potential dilution of sample pulled with volume from previous timepoint | Method-specific parameter: dependent on sample tubing volume | 6 mL | 12 mL | 25 mL |
| Waste Drop Volume (mL) | Volume pushed through the needles prior to dispensing the sample into the collection vials | Flushes/primes needles prior to sample collection to ensure volume accuracy and sample concentration; volume is deposited to waste and should be accounted for in all relevant calculations | Method-specific parameter: product-dependent setting | 0.2 mL | 0.5 mL | 10 mL |
| Estimated Minimum Transfer Time | Indicator for minimum sampling cycle time | Allows user to quickly determine sampling frequency during method setup; transfer time is updated as parameters are adjusted (faster pump speed or decreased volumes = shorter sample cycle) | Instrument and method parameters will affect estimated minimum transfer time | Optimized based on your method requirements | | |
| Aspiration Dwell Time (sec) | Time the syringe pump stops at end of the pull stroke | Allows liquid to pull through sampling lines into syringe before pushing forward | Instrument specific parameter: determined based on media and viscosity More viscous media/media with surfactants requires longer aspiration dwell time; when using the 850-DS filter module, a minimum dwell time of 3 seconds is required | 1 sec | 1 sec | 5 sec |
| Pump Speed: 6, 8, 10, or 12 mL/min | Speed of liquid movement through the sample lines | Helps to determine minimum sampling time duration (in addition to the various volumes) | Instrument setting: should be determined based on media type and required timepoint frequency More viscous media/media containing surfactants will benefit from reduced pump speed | 6 mL/min | 10 mL/min | 12 mL/min |
| Prime Loss Volume | Volume of the fluidic path from the sampling point to the place of analysis/collection, including the cannula, tubing, flow cells | Provides accurate collection and/or analysis of volume removed from each vessel at the exact sample timepoint | Instrument setting: determined per system and configuration | 4 mL (708-DS/850-DS) 7 mL (708-DS/850-DS/Cary 60) | | |

* Recommended

850-DS User Manual

Download this detailed guide to setting up, running, and maintaining your 850-DS.
www.agilent.com/chem/850-ds-user-manual



850-DS Cleaning Procedure

The 850-DS self-cleans after each dissolution test. Settings and guidance:
www.agilent.com/chem/850-ds-cleaning



850-DS Volume Calibration

The 850-DS volume accuracy should be reverified periodically. Complete procedure:
www.agilent.com/chem/850-ds-volume-calibration



Get the Answers You Need

Join the Agilent Dissolution Community for support. Access and help:
<https://community.agilent.com/technical/dissolution>

