Guided Resource Map

Agilent 708-DS Dissolution Apparatus

Agilent
Trusted Answers

One platform for all dissolution needs

The Agilent 708-DS Dissolution Apparatus provides a versatile and robust platform for standardizing dissolution testing in your lab. This instrument delivers consistent performance and results and complies with current pharmacopeia specifications.

The modular design of the 708-DS supports you in a wide range of dissolution tests, from simple manual tests to automated configurations for high-throughput sampling and online analysis. You can configure the 708-DS for 6- or 8-position testing and choose from a variety of vessel sizes and accessories based on the dosage form being tested. In addition, the 708-DS also offers you advanced usage options, including automated dosage delivery, in-vessel temperature monitoring, automated sampling, and in-situ fiber-optic analysis.

Paddles

- 14-3603 Lower interchangeable paddle, electropolished stainless steel, 1 L
- 14-3602 Lower interchangeable paddle, PTFE-coated, 1 L

Thermal Paper

- G7910-87002 Thermal printer paper for use with 708-DS, 10 rolls/pk

Filters

- 17-4000 Full Flow Filter UHMWPE, blue, 10 µm, 100/pk
- 17-4005 Full Flow Filter UHMWPE, blue, 10 µm, 1000/pk

Basket Shafts

- 14-3631 Basket shaft, lower interchangeable, 3-clip, USP

Shafts

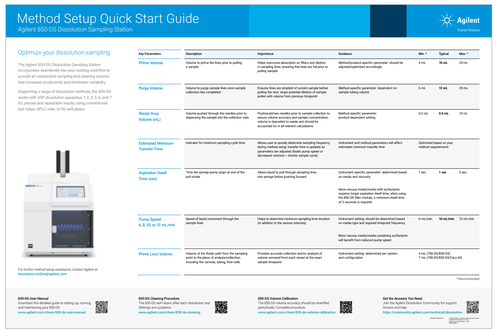
- 14-3613 Upper receptor shaft, 21 inch (total length when assembled)

Vessels

- 12-5149 TruAlign vessel, 1 L, clear
- 12-5149V TruAlign vessel, 1 L, clear, including certificate
- 12-1450 TruAlign vessel, 250 mL conversion kind, for Chinese Pharmacopeia (includes vessel, adapter, two-piece mini paddle, evaporation cover, and manifold adapter), set of 6

Cannulas

- 12-3222 Bent cannula with adjustable gauge 7.75 inch 708-DS



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-technsupp@agilent.com

Key Parameters	Description	Importance	Guidance	Min. *	Typical	Max. *
Prime Volume	Volume to prime the lines prior to pulling a sample	Helps overcome dissolution 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	5 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 sample, ensuring that sample pulled with volume from previous timepoint	Method-specific parameter: dependent on sample tubing volume	5 mL	12 mL	25 mL
Waste Drop Volume (mL)	Volume pushed through the needles prior to dispensing the sample into the collection vial	Flushes/primes needles prior to sample collection to ensure volume accuracy and sample concentration; volume is dispensed 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 1 mL/min, 5 seconds is a minimum dwell time of 2 seconds is required	1 sec	7 sec	5 sec
Pump Speed 6, 8, 15, 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
Downloadable dissolution guide to setting up, running, and maintaining your system.
www.agilent.com/chem/850-ds-user-manual

850-DS Cleaning Procedure
The 850-DS will clean after each dissolution run. Settings and procedures.
www.agilent.com/chem/850-ds-cleaning

850-DS Volume Calibration
The 850-DS volume accuracy should be verified and calibrated annually.
www.agilent.com/chem/850-ds-volume-calibration

Get the Answers You Need
Join the Agilent Dissolution Community for support.
https://community.agilent.com/technical-dissolution

Visit the following link to request your 850-DS Method Setup Guide and optimize your dissolution sampling today!
www.agilent.com/chem/850-ds-method-setup-guide

Basket

- 12-2100 Basket, USP, 40-mesh
- 12-2100V Basket, USP, 40-mesh with certificate

Sinkers

- 12-3000 Capsule weight wire, 316 stainless steel, 0.032 inch dia., 50 ft
- 12-3050 Capsule weight, 3-prong
- 12-3070 Sinker basket, Japanese Pharmacopoeia (JP)

Supplies Quick Reference Guide
Download the complete list of supplies.
www.agilent.com/chem/708-ds-quick-reference-guide

Sampling Position Guidance
Optimize your 708-DS for precise sampling positioning.
https://www.agilent.com/chem/708-ds-sampling-position-guide

Are You Ready? Pretest Checklist
Use this quick checklist for an error-free start to every test!
www.agilent.com/chem/708-ds-pretest-checklist

Get the Answers You Need
Join the Agilent Dissolution Community for support.
https://community.agilent.com/technical/dissolution

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Printed in the USA, October 1, 2021
5994-3929EN