Biotage® SPE Dry 96

Sample Concentrator System

Biotage® SPE Dry 96 and SPE Dry 96 Dual Sample Concentrators are suitable for evaporation of microplate samples across a broad range of formats. By delivering heated gas above and below each well, SPE Dry 96 systems dry samples quickly maintaining tight temperature control at user selected settings. Designed for high throughput sample processing, SPE Dry systems have simple front panel controls and use removable gas delivery assemblies for fast adjusting and cleaning.

Versatile Formats

SPE Dry is designed with novel technology and a simple interface to produce uniform and reproducible evaporation. The design has a small footprint to fit easily in the fume hood. The heating mechanism is designed to rapidly heat without overshooting the temperature, preventing degradation of temperature sensitive compounds.

Standard SPE Dry 96 and SPE Dry 96 Dual systems are supplied with stainless steel needles. For high purity work, or applications that require particularly aggressive solvents, PTFE coated needles are available. Both needle types can be individually replaced should they become damaged or corroded.

SPE Dry is available in single or dual format and adapts easily to 24-, 48-, 96-, and 384-well microplate formats.

Advantages

- Efficient evaporation through heated gas flow above and below collection plate
- Precise temperature control and gas flow with reproducible evaporation times
- Compact design
- Easy to use
- Suitable for 24-,48-, 96- and 384-well microplates





Figure 1. SPE Dry 96 with optional Biotage® ACT Plate Adapter (left). SPE Dry 96 Dual (right).

Specifications

Technology

Number of Samples

Format

Timer

Max. Sample Volume **Final Endpoint Volumes**

Capacity

Operating Temperature

Gas Supply Requirements

Operating Flow Rate

Exhaust

Electrical Supply Max. Power Consumed Dimensions (WxDxH)

110 or 220 VAC, 50 or 60 Hz, 5A

Min 25 LPM, Max 60 LPM (Single),

Heated gas delivery above and below wells speeds evaporation

Models for one or two 96 well

8 x 12 well microplates and

24, 48, 96 or 384 well plates

1 bar to 4 bar (15 psi to 65 psi)

10 mL collection plates

60 °C (upper head)

80 °C (lower head)

90 LPM (Dual)

deep-well plates

Manual

25.4 cm x 38.1 cm x 40 cm (dual) 10" x 15" x 15.7

24.2 cm x 30.6 cm x 40 cm (single)

9.5" x 12" x 15.7"

Weight 13.9 kg/31 lbs Certifications

EN61326 (1997 w/A1: 98 & A2: 01)

Class A

20% to 80% RH (non-condensing) Humidity

up to 31 °C



Evaporation Rates¹ (minutes)

| Salvant | 40 | °C² | 60 °C² | |
|---|---------|-------|---------|-------|
| Solvent | 500 μL³ | 1 mL⁴ | 500 μL³ | 1 mL⁴ |
| Methanol | 14 | 28 | 11 | 20 |
| Water | 90 | 165 | 46 | 86 |
| Methanol/water (50:50) | 46 | 95 | 28 | 56 |
| Propan-2-ol | 16.5 | 26 | 11.5 | 16.5 |
| Acetonitrile/water (50:50) | 51 | 60 | 31 | 36 |
| Methanol/acetonitrile (50:50) | 19 | 24 | 12 | 15 |
| Acetonitrile | 17 | 20 | 12 | 15.5 |
| Methanol/(v/v) 1% NH ₄ OH | 18 | 28 | 13.5 | 16 |
| DMF | 73 | 105 | 33 | 41 |
| Methanol/dichloromethane (50:50) | 12 | 15.5 | 7.5 | 9.5 |
| Dichloromethane (v/v) 1% NH ₄ OH | 8.5 | 11.5 | 6 | 8 |

- 1. Experiments were conducted with flow rate at 50 liters/minute at the upper manifold and 30 liters/minute at the lower manifold. Drying gas used was compressed air. Only standard moisture trap was used within the system. Moisture content of ambient air will affect results.
- 2. Temperatures refer to the upper head. Bottom unit was 20 °C higher.
- 3. 500 µL volumes were in a 1 mL collection plate.
- 4. 1 mL volumes were in a 2 mL collection plate.

Biotage® ACT Plate Adapter

Protect your samples from cross contamination (cross talk) during evaporation. Designed for use with square well collection plates, Biotage® ACT (Anti Cross Talk) Plate Adapter is compatible with Biotage® SPE Dry 96 and SPE Dry 96 Dual Sample Concentrator Systems.



Ordering Information

| Part Number | Description | Quantity | | Part Number | Description | Quantity |
|---|--|----------|---|-------------------|--|----------|
| SD-9600-DHS-NA | SPE Dry 96 Sample Concentrator System, 100/120V | 1 | : | SD2-9600-DHS-EU | SPE Dry 96 Dual Sample Concentrator System, 220/240V | 1 |
| SD-9600-DHS-EU | SPE Dry 96 Sample Concentrator System, 220/240V | 1 | : | SD2-9600-DHS-T-NA | SPE Dry 96 Dual Sample Concentrator System, with PTFE | 1 |
| SD-9600-DHS-T-NA SPE Dry 96 Sample Concentrate System, with PTFE Coated | | 1 | | | Coated Needles (Top Head Only), 100/120V | |
| | Needles (Top Head Only), 100/120V | | : | SD2-9600-DHS-T-EU | SPE Dry 96 Dual Sample Concentrator System, with PTFE | 1 |
| SD-9600-DHS-T-EU | SPE Dry 96 Sample Concentrator System, with PTFE Coated | 1 | | | Coated Needles (Top Head Only), 220/240V | |
| | Needles (Top Head Only), 220/240V | | 4 | 414355SP | Biotage® ACT Plate Adapter | 1 |
| | | | | 121-5202 | Collection plate, 1 mL, Square | 1 |
| SD2-9600-DHS-NA | SPE Dry 96 Dual Sample Concentrator System, 100/120V | 1 | | 121-5203 | Collection plate, 2 mL, Square | 1 |

| EUROPE | NORTH & LATIN AMERICA | JAPAN | CHINA | KOREA |
|----------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Main Office: +46 18 565900 | Main Office: +1 704 654 4900 | Tel: +81 3 5627 3123 | Tel: +86 21 2898 6655 | Tel: + 82 31 706 8500 |
| Toll Free: +800 18 565710 | Toll Free: +1 800 446 4752 | Fax: +81 3 5627 3121 | Fax: +86 21 2898 6153 | Fax:+ 82 31 706 8510 |
| Fax: +46 18 591922 | Fax: +1 704 654 4917 | jp_order@biotage.com | cn_order@biotage.com | korea_info@biotage.com |
| Order Tel: +46 18 565710 | Order Tel: +1 704 654 4900 | jp-1-pointsupport@biotage.com | cn-1-pointsupport@biotage.com | kr-1-pointsupport@biotage.com |
| Order Fav. + 46 18 565705 | Order Fav. +1 /3/ 206 8217 | | | |

Distributors in other regions are listed on www.biotage.com



order@biotage.com

Support Tel: +46 18 56 59 11

Support Fax: + 46 18 56 57 11 Outside US: +1 704 654 4900 eu-1-pointsupport@biotage.com us-1-pointsupport@biotage.com

ordermailbox@biotage.com

Support Tel: +1 800 446 4752