



Evaporex® – Microplate Evaporators (EVX) High-Performance Drydown for Microplates

Dual Upper/Lower Heat Source
Minimizes Drying Time

Sealed Gas Pathway
Prevents Contamination

Adjustable Temperature/Flow Rate
Concentrates Samples Faster

Evaporex (EVX)

is purpose-built for high-performance drydown of microplates for drug discovery and research applications.

EVX's two stainless steel needle assemblies evenly distribute heated gas into microplates from both top and bottom minimizing drying time. Thus, saving time in the discovery process. The upper gas flow path is sealed away from the heating elements in a stainless steel pathway preventing sample contamination. The lower platform adjusts to allow the needles to come in close proximity to the sample – without touching.

MODELS

EVX-96 / EVX-192

Aqueous or non-corrosive liquids from shallow or deep well microplates. Dual heat source.

EVX-96T1 / EVX-192T1

Strong acids or halide-containing organics. Dual heat source. PTFE coated head on top.

EVX-96T2 / EVX-192T2

SPE or filtration plates. Dual heat source. PTFE coated head on top and bottom.

EVX-96-384 / EVX-192-384

Use with 384 plates. Dual heat source with 384 channel head on top.

EVX Series Microplate Evaporators

- For aqueous or organic solvents (not dry or concentrated acid solutions)
- Fit under common hood or micro-ventilation system setups
- User-adjustable flow rates and gas temperatures for temperature-sensitive drying
- Easily removable upper and lower assemblies for quick and easy cleaning
- Single (EVX-96) or dual-plate configurations (EVX-192)
- 96 and 384-well formats

SPECIFICATIONS

Power	110/240 VAC, 50/60 Hz
Inlet Gas Connection	1/4"
Supply Pressure Range	15–50 PSI
Operating Flow Rate	25–60 LPM
Operating Temperature	140°F (Upper), 176°F (Lower) Max 60°C (Upper), 80°C (Lower) Max
EVX96 Dimensions	9.52"W x 12.05"D x 15.72"H (242mmW x 306mmD x 400mmH)
Weight	25 lbs (11kg)
EVX192 Dimensions	10"W x 15"D x 15.5"H (254mmW x 381mmD x 394mmH)
Weight	31 lbs (14kg)



EVX-96 comparison of evaporation rate

Solution	Ratio	Vol	LPM	Temp	Time
Water	100%	200 µL	50	60°C	22 min
Water	100%	200 µL	90	55°C	17 min
Water	100%	500 µL	50	60°C	46 min
Water	100%	500 µL	90	55°C	37 min
Methanol	100%	200 µL	50	40°C	6 min
Methanol	100%	200 µL	50	55°C	5 min
Methanol	100%	200 µL	80	55°C	4.5 min
Methanol	100%	500 µL	50	55°C	12 min
Methanol	100%	500 µL	90	55°C	7 min
Methanol / Water	50 : 50	200 µL	50	40°C	20 min
Methanol / Water	50 : 50	200 µL	50	55°C	15 min
Methanol / Water	50 : 50	200 µL	80	55°C	11 min
Methanol / Water	50 : 50	500 µL	50	55°C	32 min
Methanol / Water	50 : 50	500 µL	90	55°C	24 min

EVX-192 comparison of evaporation rate

Solution	Ratio	Vol	LPM	Temp	Time
Water	100%	200 µL	80	60°C	24 min
Water	100%	500 µL	80	60°C	60 min
Methanol	100%	200 µL	90	40°C	8 min
Methanol	100%	200 µL	90	55°C	6 min
Methanol	100%	500 µL	90	55°C	13 min
Methanol / Water	50 : 50	200 µL	90	40°C	22 min
Methanol / Water	50 : 50	200 µL	90	55°C	16 min
Methanol / Water	50 : 50	500 µL	90	55°C	40 min

Examples seen in the lab, or reported by customers (EVX-96)

Solution	Ratio	Vol	PSI	Temp	Time
Butanolic Acid	100%	80 µL	14	50°C	9 min
Methylene Chloride	100%	500 µL	20	55°C	3 min
Ethyl Acetate	100%	1 mL	18	50°C	12 min
Ethyl Acetate	100%	1 mL	18	60°C	9 min
Acetonitrile	100%	500 µL	18	50°C	17 min
Acetonitrile	100%	750 µL	20	55°C	20 min
Dichloroethane	100%	500 µL	20	55°C	18 min
Methanol/ACN	50 : 50	600 µL	20	50°C	19 min

Note: EVX-192 needs approximately 2 times of flow rate as used in in order to obtain the same dry-down efficiency.

SPE Single comparison of evaporation rate

Solution	Ratio	Vol	LPM	Temp	Time
Water	100%	200 µL	50	60°C	20 min
Water	100%	200 µL	90	55°C	15 min
Water	100%	500 µL	50	60°C	44 min
Water	100%	500 µL	90	55°C	35 min
Methanol	100%	200 µL	50	40°C	5 min
Methanol	100%	200 µL	50	55°C	4 min
Methanol	100%	200 µL	80	55°C	3.5 min
Methanol	100%	500 µL	50	55°C	10 min
Methanol	100%	500 µL	90	55°C	6 min
Methanol / Water	50 : 50	200 µL	50	40°C	18 min
Methanol / Water	50 : 50	200 µL	50	55°C	13 min
Methanol / Water	50 : 50	200 µL	80	55°C	9 min
Methanol / Water	50 : 50	500 µL	50	55°C	30 min
Methanol / Water	50 : 50	500 µL	90	55°C	22 min

SPE Double comparison of evaporation rate

Solution	Ratio	Vol	LPM	Temp	Time
Water	100%	200 µL	80	60°C	22 min
Water	100%	500 µL	80	60°C	58 min
Methanol	100%	200 µL	90	40°C	7 min
Methanol	100%	200 µL	90	55°C	5 min
Methanol	100%	500 µL	90	55°C	11 min
Methanol / Water	50 : 50	200 µL	90	40°C	20 min
Methanol / Water	50 : 50	200 µL	90	55°C	14 min
Methanol / Water	50 : 50	500 µL	90	55°C	38 min

Examples seen in the lab, or reported by customers (SPE-Single)

Solution	Ratio	Vol	PSI	Temp	Time
Butanolic Acid	100%	80 µL	14	50°C	9 min
Methylene Chloride	100%	500 µL	20	55°C	3 min
Ethyl Acetate	100%	1 mL	18	50°C	12 min
Ethyl Acetate	100%	1 mL	18	60°C	9 min
Acetonitrile	100%	500 µL	18	50°C	17 min
Acetonitrile	100%	750 µL	20	55°C	20 min
Dichloroethane	100%	500 µL	20	55°C	18 min
Methanol/ACN	50 : 50	600 µL	20	50°C	19 min

Note: SPE-Dual needs approximately 2 times of flow rate as used in order to obtain the same dry-down efficiency.