



Unopex S 15 Mini Spray Dryer
Technical Data Sheet

Unopex S 15 Mini Spray Dryer has is a laboratory instrument for quick and gentle drying. It serves to spray-dry aqueous solutions or suspensions.

In combination with Unopex S 45 Dehumidifier and Unopex S 60 Inert Cycle, it is possible to work with feeds containing organic solvents in "closed cycle". Operation in closed cycle requires N₂ as an inert gas.



Scope of Supply

Code	Component
877155	S 15 Mini Spray Dryer
40500	2-fluid nozzle (0.7 mm) complete with automatic nozzle de-blocking
252100	Touchscreen operating panel
42092	Glass assembly complete
244200	Inlet filter, complete with filter element
241100	Peristaltic pump
47110	Peristaltic pump tubing, silicone (1 m)
48030	Cleaning brush for nozzle
44100	Outlet filter, complete with filter bag
45200	Feed valve
254150	Safety curtains, complete set
255120	Closed cycle operation module
249110	Operation Manual, English
249210	Quick Operation Guide, English

Optional Complementary Units

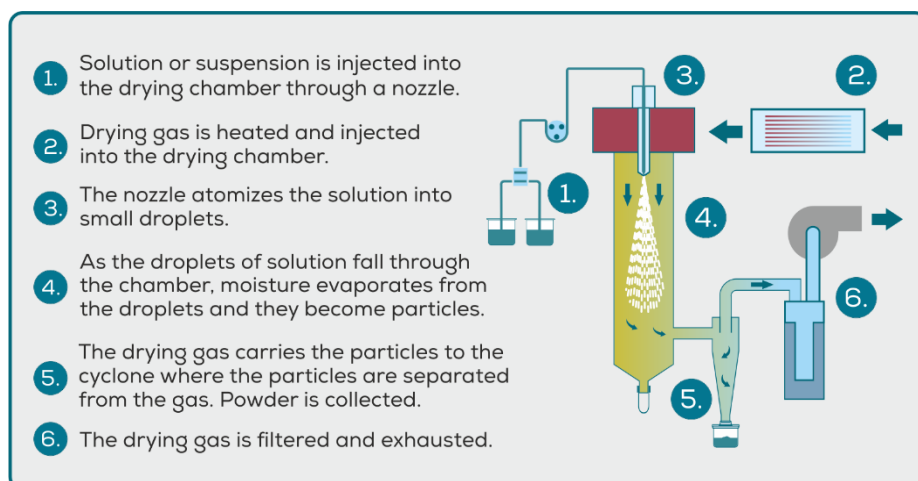
Code	Unit
878450	S 45 Dehumidifier
878600	S 60 Inert Cycle
878900	S 92 Spray Chilling
877450	C 20 Oil-free Air Compressor

Optional Accessories

Code	Accessory
42022	High performance cyclone
42095	Brown glass assembly, complete (for light sensitive applications)
244500	HEPA filter inlet, complete
244550	HEPA filter outlet, complete
47130	Peristaltic pump tubing, pharmed (1 m)
108320	Trolley
117410	Spray cylinder insulation
120202	IQ/OQ documentation

Working Principle

Unopex S 15 Mini Spray Dryer operates in co-current flow configuration where the drying gas flows in the same direction with the sprayed sample product.



Technical Data

Model	Unopex S 15 Mini Spray Dryer
Evaporating capacity	1500 mL/h H ₂ O, higher for organic solvents
Max. inlet temperature	220 °C (opt. 250 °C), adjustable
Ambient conditions	for indoor use only altitude up to 2000 meters above sea level temperature: 5–40 °C relative humidity up to 31 °C max. 80% and decreasing linearly to 50% up to 40 °C
Feed pump	peristaltic, variable speed
Operating panel	10" LCD graphic display
Configuration	co-current
Spray gas	compressed air or nitrogen
Atomization	2-fluid nozzle with automatic cleaning feature tip diameter 0.7 mm standard, optional sizes available
Blower	variable speed
Heating	electrical, 3 kW
Operating panel	touchscreen
Computer connection	ethernet and usb

Material of Construction for Product Contact Parts

Feed tubing	silicone / tygon / pharmed
2-fluid nozzle	stainless steel (AISI 316L/AISI 316)
Hot air duct	stainless steel (AISI 304/AISI 316)
Glass parts	heat resistant borosilicate glass



Unopex S 45 Dehumidifier

can be used in open mode in combination with Unopex S 15 Mini Spray Dryer to condition drying air for spray drying under constant and reproducible humidity conditions or to cool inlet air in spray chilling operation.

Minimum outlet temperature	0 °C
Cooling capacity	800 W @ 0 °C

Unopex S 60 Inert Cycle

enables safe operation of S 15 Mini Spray Dryer with 100% organic solvents under inert conditions,

use in closed cycle in combination with S 15 Mini Spray Dryer and S 45 Dehumidifier enables to work with water/organic solvent mixtures safely.

Minimum outlet temperature	-30 °C
Cooling capacity	1200 W @ 0 °C



 Izmir / Turkiye
 +90 232 479 80 17
 unopex@unopex.com
 www.unopex.com



 unopex® is a division of  BAKON

All rights reserved. 510101, technical data or images are subject to change without notice.