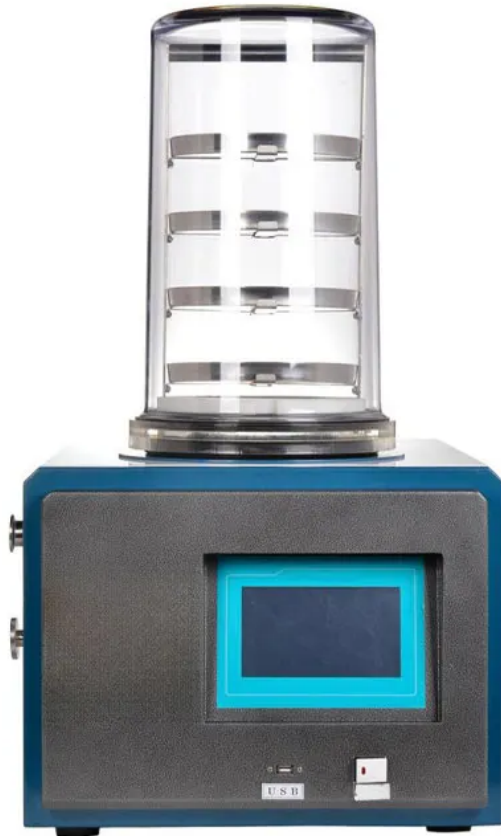




ORDINARY VACUUM FREEZE DRYER

Ordinary Vacuum Freeze Dryer is a preservation technology based on the principle of sublimation. It rapidly freezes materials at low temperatures, and in a controlled vacuum environment, frozen water molecules are directly converted into vapor. The material remains frozen throughout the process, with ice crystals evenly distributed within it. Sublimation prevents dehydration-related concentration, avoiding issues like foaming or oxidation caused by water vapor.

APPLICATIONS

Freeze-dried products are spongy, exhibit no shrinkage, rehydrate effectively, and contain minimal water. Once appropriately packaged, they can be stored and transported at room temperature for extended periods.

A freeze dryer is well-suited for various applications, including freeze drying, strain preservation, and more, in fields such as biological research, medicine, pharmaceuticals, chemical industries, food processing, and academia.

This method preserves the activity of heat-sensitive substances, maintains nutritional value by preventing oxidation, requires no additives, and ensures freshness over time. The resulting products are loose, porous, and sponge-like, dissolving rapidly and fully upon rehydration, almost instantly regaining their original form.

Ordinary Vacuum Freeze Dryer

Ordinary Vacuum Freeze Dryer

CYFD-10

Ordinary Vacuum Freeze Dryer

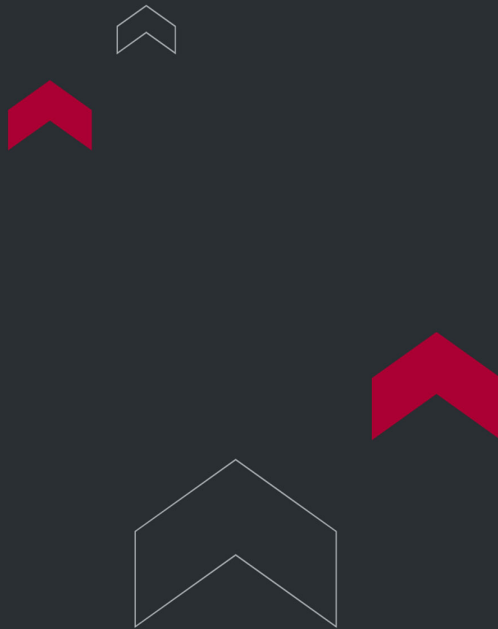
FEATURES

- **Rapid cooling** ensures a uniform temperature across the inner wall of the cold trap, enhanced by advanced gas diversion technology for effective moisture capture.
- **Eco-friendly cooling** with a Secop compressor and single-unit hybrid refrigeration system.
- **Integrated pre-freezing** eliminates the need for ultra-low-temperature refrigerators or liquid nitrogen.
- **7-inch color LCD touchscreen** with an intuitive user interface, lock screen capability, and optional remote control via smartphone or computer.
- Displays key parameters such as cold trap temperature, vacuum level, sample temperature, and runtime, with simple operation and access controls to prevent errors.
- **Data management features** include viewing, exporting, and deleting freeze-drying data, with automatic saving and USB export support.
- **Versatile compatibility** for freeze-drying ampoules, vials, glass flasks, plasma bottles, or trays.
- **Efficient pre-freezing and defrosting:** The cold trap supports sample pre-freezing and includes a one-touch defrost feature.
- Built-in **maintenance reminders** to alert users when upkeep is needed.
- **Vacuum monitoring** with an alarm function to notify users if vacuum levels are outside normal ranges.
- **High-precision vacuum valve** for micro-adjustments.
- Comes with a **stainless steel, anti-corrosion vacuum connection pipe** and a standard KF25 quick coupling clamp.

TECHNICAL SPECIFICATIONS

Model	CYFD-10 ordinary type	CYFD-12 ordinary type	CYFD-18 ordinary type
-------	-----------------------	-----------------------	-----------------------

Freeze dried area	0.1 m ²	0.12 m ²	0.18 m ²
Cold trap temperature	-60 °C (optional -80 °C)		
Catching water volume/batch	4KG		6KG
Standard vacuum degree	≤ 5 Pa (no-load)		
Ultimate vacuum	0.1 Pa		
Pumping speed	2L/s		4L/s
Material tray	180mm, 4 layers in total	200mm, 4 layers in total	240mm, 4 layers in total
Disc spacing	70mm		
Bottled loading number of vials	Vial Φ 12mm: 700 pieces v Φ 16mm: 400 pieces Vial Φ 22mm: 210 pieces	Vial Φ 12mm: 849 pieces v Φ 16mm: 470 pieces Vial Φ 22mm: 252 pieces	Vial Φ 12mm: 1270 pieces v Φ 16mm: 716 pieces Vial Φ 22mm: 379 pieces
Eggplant shaped flask	100ml*2 150ml*2	250ml*2 500ml*2	100ml*2 150ml*2
Overall power	950W (including vacuum pump)		1100W (including vacuum pump)
Machine size	520W * 600D * 400H mm	480W * 600D * 770H mm	560W * 560D * 980H mm
Machine net weight	48KG	63KG	88KG
Packaging size	740W * 810D * 850H mm	620W * 850D * 920H mm	630W * 670D * 1500H mm
Total weight with packaging	98KG	140KG	150KG
Power supply	AC220V 50Hz or 110V/60Hz		
Application environment	Ambient temperature ≤ 35 °C		
Operating noise of the entire machine	≤55dB		



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 🇨🇦

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 🇺🇸

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 🇦🇪

Phone: +971 488 19252
Email: me@torontech.com

