



Get a new refrigerator instead of a new clean room

TSX Series refrigerators help ensure compliance with USP <797> and USP <800> standards for compounding

United States Pharmacopeia drafted the (USP™) <797> and USP <800> standards to ensure sterile preparation and handling practices for hazardous drugs. With an expected implementation deadline of December 1, 2019, health care systems must begin evaluating their compliance with these guidelines. Renovations could require significant investment and take months to complete, and failure to comply can result in fines, suspensions, or loss of licenses.

According to the USP <800> guidelines, when compounding hazardous drugs:

- Environmental chambers must operate at a negative pressure
- Pass-through refrigerators can no longer be used
- Conventional refrigerators must be vented to outside the room
- Dedicated refrigeration needs to be maintained

Thermo Scientific™ TSX Series biomedical Lab refrigerators are designed to meet future standards

Built using variable-speed and solid-state Phononic™ technology, TSX refrigerators have low exhaust, low vibration, and low particulate emissions.



Don't let a clean room renovation clean out your budget

Before developing construction plans for a costly ventilation system, consider switching to a refrigerator line that can be immediately used (and easily moved) in a clean room environment without additional dedicated ventilation.

TSX refrigerators are the simple choice for compliance with USP <797> and <800> regulations because:

- **No special ventilation is required**—Unlike traditional refrigerator systems that generate and disperse particulates, variable-speed and solid-state refrigerators do not require added measures for venting to outside of the room. TSX refrigerators are compliant to USP <797> and <800>*, allowing you to avoid costly renovation projects needed for upgrading conventional refrigerators.
- **They provide superior temperature stability and lower heat output**— TSX refrigerators use constant monitoring and continuous adjustment to deliver far more stable temperatures than conventional refrigerators, for safer storage. In addition, these cooling technologies are ENERGY STAR™ certified, delivering 40–50% energy savings and a cooler working environment. This helps lessen the burden on your facility to maintain temperature and environmental control.

- **They are easy to clean and maintain, suitable for sterile clean room environments**—A modern, simple design makes these refrigerators easier to clean than standard refrigerators. And with the variable-speed and solid-state technologies, there are fewer moving parts that weaken over time and fail. This translates to less preventive maintenance, increased dependability, and simpler service and repairs when needed.



TSX505GA undercounter lab refrigerator

* UL test data generated in accordance to ISO 14644-14 show TSX series refrigerators to meet ISO 6 and ISO 7 dependent on model.

Ordering information

Capacity	Doors	Shelves/ drawers	Sound level	Energy consumption	Exterior dimensions (D x W x H)	Electrical	VWR Cat. No.*
TSX Series high-performance undercounter lab refrigerators							
5.5 cu. ft. (156 L)	1 solid	3 shelves	35 dBA	2.7 kWh/day	23.6 x 26.9 x 31.3 in. (60 x 68.3 x 79.5 cm)	100–230 V, 50–60 Hz	75993-424
	1 glass			3.1 kWh/day	23.6 x 26.9 x 31.3 in. (60 x 68.3 x 79.5 cm)		75993-428
TSX Series high-performance pharmacy refrigerators							
23 cu. ft. (650 L)	1 glass	6 basket drawers	52 dBA	4.4 kWh/day	37.8 x 28 x 78.5 in. (71.1 x 96.2 x 199.4 cm)	115 V, 60 Hz	75839-044
51 cu. ft. (1,447 L)	Double glass	8 basket drawers		6.7 kWh/day	37.8 x 56.5 x 78.5 in. (96 x 143.5 x 199.4 cm)	208–230 V, 60 Hz	75839-104
						115 V, 60 Hz	76208-594
						208–230 V, 60 Hz	76208-596

Note: Other TSX Series biomedical refrigerators, freezers, and ultralow freezers are available, all of which are manufactured in an award-winning, zero-waste-to-landfill facility.

* The letters A and D at the end of the catalog numbers distinguish different electrical plug types. Please contact your representative for further information.