thermo scientific

Accelerate productivity with unequalled durability

Thermo Scientific Fiberlite Carbon Fiber Rotors





D LEX

Thermo Scientific Fiberlite rotors

maximize centrifuge performance with versatility, speed and a robust, corrosion-free design

Improved ergonomics and productivity Lightweight design

Large metal centrifuge rotors often present a unique lifting hazard in the laboratory due to their weight and awkward shape. Lightweight Fiberlite rotors—up to 60% less weight than metallic rotors⁽¹⁾—facilitate a safer work environment and minimize risk of damage to centrifugation equipment as a result of these ergonomic improvements.

Additionally, these lightweight properties result in faster acceleration/deceleration rates for shorter run times.

Unequalled durability and cleaning convenience Corrosion and fatigue resistance

Traditionally, the primary cause of rotor failure is from damage to metal surfaces due to moisture, chemicals or alkaline solutions that weaken the metal rotor's structural integrity. Carbon fiber composite rotors are corrosion-resistant, eliminating this ever-present hazard, and are safe to use with most mild laboratory detergents and solutions, providing easy rotor care and maintenance.

Substantial load or stress, as a result of high rotational speeds and repeat cycles, can also threaten metal rotor structure by causing it to stretch and change in size, limiting rotor life or leading to failure. Thermo Scientific[™] Fiberlite[™] rotors are fatigue-resistant, mitigating this threat.

Weight

Weight comparison of fully loaded 6 x 250 mL capacity floor model rotors⁽¹⁾



Figure 1. Weight savings with carbon fiber rotors.

Speed

Acceleration and deceleration rate comparison of 6 x 250 mL capacity floor model rotors⁽¹⁾

Fiberlite carbon fiber rotor	1:35/1:15	Saving (2:55 minut	
Aluminum rotor		3:45	/2:00
	Accel/decel ra	atos	

Figure 2. Time savings with carbon fiber rotors.

1 Based on a comparison with manufacturers' published specifications.



Exceptional value within your reach 15-year warranty^[2] in all centrifuges

Unlike the limited lifetime of metal rotors due to potential failure risks, Fiberlite carbon fiber rotors are backed by a warranty^[2] up to two times longer than other rotors^[3].

Unique repairability

In contrast to traditional metal rotors, Fiberlite carbon fiber rotors are repairable if damaged.

Superior insulation

Carbon fiber material possesses naturally insulating properties, which helps to maintain sample temperature integrity.

Warranty

Average warranty periods for metal rotors compared with Fiberlite carbon fiber rotors^[4]



Figure 3. Warranty with carbon fiber rotors.

2 Subject to Thermo Fisher Scientific's standard limited warranty. See thermofisher.com or your sales representative for details.

3 Warranty coverage may vary by rotor. Please refer to manufacturer for specific warranty coverage for each rotor.

4 Average warranty periods were calculated based on industry average of years an aluminum or titanium rotor may be covered under warranty per manufacturers' published specifications.



Best-in-class Thermo Scientific Fiberlite rotor portfolio

Seamless integration

From benchtop instruments to advanced floor models, Thermo Scientific centrifuge systems are designed to deliver outstanding performance and reliability in the lab. We provide an integrated solution of rotors, equipment, and accessories, offering exceptional value and best-in-class features including:

- innovation and technical design
- high capacity and speed
- operator, sample and system safety
- operational longevity of your system

Sample containment

- In the event of a tube or bottle failure, a volume of fluid can be contained inside the rotor in a liquid containment annulus, preventing biohazardous samples from escaping; available on select rotors.
- To enhance containment of biohazardous samples, rotors certified by Public Health England, Porton Down, UK are noted by 🚸.
- Lids for rotors featuring Thermo Scientific[™] Auto-Lock[™] rotor exchange enable rotors to remain sealed while being carried to a biocontainment hood for sample retrieval; available on select rotors.



Fiberlite LEX rotor series

The next generation of high capacity Fiberlite rotors, the Fiberlite LEX rotor series, further advances the current carbon fiber design, combining even lower mass with low kinetic energy to deliver superior ergonomics with outstanding performance and safety.

Fiberlite

F9-6x1000 LEX F10-4x1000 LEX F12-6x500 LEX F10-6x100 LEX F20-12x50 LEX

Ergonomic design

Fiberlite LEX rotors take the lightweight design of carbon fiber to a whole new level; these rotors are the lightest of their kind^[1], further improving ergonomics and ease of handling.

Exceptional performance

The Fiberlite LEX rotor series provides outstanding RCF performance for enhanced productivity—up to 24,471 xg with the 6 x 500 mL (3-Liter volume) Fiberlite LEX rotor and up to 17,568 xg with the 6 x 1000 mL (6-Liter volume) Fiberlite LEX rotor.

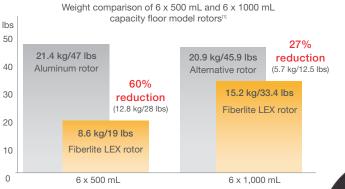


Figure 4. Lower weight advantage of Fiberlite LEX rotors.

1 Based on a comparison with manufacturers' published specifications.

Enhanced safety

From sample protection with advanced sealing properties, to leveraging the rotor's lifting handle, Fiberlite LEX rotors are the top choice for a safe work environment.

In today's biomedical and microbiological laboratories, containment of biological agents and infectious substances are an essential element in maintaining a safe environment. Fiberlite LEX rotors provide multiple levels of protection to enhance biosafety without compromising functionality or convenience.

- 1. **Biocontainment tested:** Rotors certified by Public Health England, Porton Down, UK are noted by 😵.
- 2. Liquid containment annulus: In the event of a bottle failure, a volume of fluid is contained inside the rotor, preventing biohazardous samples from escaping.
- Auto-Lock rotor exchange with Thermo Scientific[™]
 Auto-ID[™] rotor identification: Simplifies run set-up and mitigates the worry of overspeeding or rotor accidents.

Lower kinetic energy resulting from the lightweight design, enhances equipment performance and safety of work environment.



Superspeed rotors

With volumes ranging from 1.5 mL to 6 Liters, a full range of Fiberlite carbon fiber rotors is available for superspeed floor model centrifuges, facilitating applications spanning pharmaceutical, biotechnology and academic research.



Figure 5. Rotor cross section displaying the position of the built-in lifting handle and liquid containment annulus (available on select rotors).

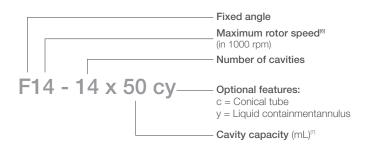


Figure 6. Fiberlite rotor model nomenclature.

6 Actual maximum rotor speed may vary depending on centrifuge.

High capacity and seamless compatibility

Fiberlite F9-6x1000 LEX F10-4x1000 LEX F12-6x500 LEX F14-6x250y

- Simplify preparation by loading tubes directly into Fiberlite rotors, eliminating multi-piece canister assemblies, which can be misplaced or damaged.
- Work seamlessly with Thermo Scientific[™] bottles, including the 1000 mL Fiberlite high performance widemouth polypropylene and polycarbonate centrifuge bottles that process one full liter at maximum speeds (20,584 xg) with leakproof assembly.

Enhanced ergonomics

- Lightweight design allows easy rotor transport in and out of the centrifuge.
- Installation or exchange of rotors requires less force especially with lifting handle on select models—reducing risk of injury.

Conical tube efficiency

Fiberlite F14-14x50cy F15-8x50cy

- Spin 14 x 50 mL conical tubes at maximum rotor speed (33,700 xg) without tube damage.
- Process 15 mL conicals with available adapters for flexibility.

Small-volume protocol support

Fiberlite F20-12x50 LEX F21-8x50y F23-48x1.5

• Small-volume pelleting and microtubes ranging from 1.5 to 50 mL at RCFs up to 57,300 xg.

⁷ Actual fill volumes may vary from nominal volume.

Fiberlite rotors for the Thermo Scientific[™] Sorvall[™] LYNX Superspeed Centrifuge series

Rotor innovations shorten run set-up time while providing peace-of-mind that the rotor is secure.



Figure 7. Auto-Lock rotor exchange. Secure, trouble-free rotor installation and removal in as little as 3 seconds.

Auto-Lock rotor exchange

Secure, push-button rotor exchange in as little as 3 seconds delivers:

- Improved safety and confidence that the rotor is automatically and securely locked and will not loosen during a run.
- Trouble-free rotor installation and removal.
 - No tools are required.
 - The rotor locks itself to the centrifuge, eliminating the need for hand-tightening.
- Flexibility to quickly change rotors and applications, matching the needs of your laboratory—today and in the future.



Figure 8. Auto-ID instant rotor identification. Improves safety, saves times, and protects the integrity of your samples.

Auto-ID instant rotor identification

Immediate identification of a rotor when secured in the centrifuge chamber, with rotor specifications automatically loaded into the centrifuge parameters.

- Shortens run set-up time by eliminating the need to find and set rotor codes.
- Eliminates over-speed risk, reduces error messages, and improves centrifuge, sample and operator safety.



Figure 9. Speed handle on rotor lids. Makes tightening the lid safer while also simplifying lid removal.

Speed handle on rotor lids

- Accelerates and simplifies rotor lid tightening, ensuring lid is properly attached.
- Easier and safer lifting and carrying of rotors, further enhanced with the lightweight design.

innovative rotor convenience

Conical tubes

Complete workflow in disposable conical tubes

Fiberlite F13-14x50cy F15-8x50cy

- Run samples in inexpensive, disposable conical tubes, reducing the chance for cross-contamination and eliminating many non-productive tasks such as sample transfers and autoclaving.
- Reduce processing times by spinning at maximum speeds up to 33,700 xg[®] without risk of tube damage.
- Clarify crude lysates for plasmid DNA preps from Qiagen[™] Maxi and Midi Prep protocols.

8 Maximum g-force specification may vary depending on centrifuge and tube manufacturer.





Figure 10. Through exclusive technology, Fiberlite rotor cavities are molded to the exact shape of many disposable conical tubes for maximum support; 50 mL conical tube shown here. In addition, a cap support is designed to relieve high g-forces.

Spin sample in one tube until it's ready to store.

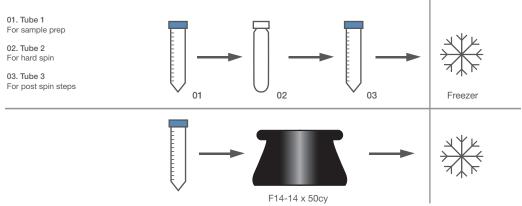


Figure 11. Support preparative centrifugation in a single conical tube for time and cost efficiencies and waste reduction.

Ultraspeed rotors

From proteomics and cell clarification to nucleic acid preparation, the advanced design and manufacturing of Fiberlite ultraspeed rotors deliver high performance, eliminating corrosion and the need for derating or reducing speed over the rotor lifespan.

Large volume processing Fiberlite | F37L-8x100

- Realize 33% more capacityⁱⁱ⁾ with two additional tube cavities for high volume separations.
- Achieve forces of up to 182,460 xg for time savings on separations of subcellular organelles or concentration of viruses.
- Collect or purify small macro molecular species including enzymes, antibodies and proteins from standard culture flasks up to 500 mL in a single run.

Remarkable sample throughput of microtubes Fiberlite | F50L-24x1.5

- Provide full tube support at RCF of 280,000 xg for sharp and efficient pelleting of microparticles in high performance microtubes.
- Run partial filled tubes, as low as 0.2 mL, at maximum speed for extended times without excessive tube crazing or sample loss.
- Experience multifunctional use for preparative analysis with ultracentrifuge systems.

1 Based on a comparison with manufacturers' published specifications.



Figure 12. Fiberlite ultraspeed rotors (counterclockwise from top right): F37L-8x100 (37,000 rpm; 182,460 xg); F50L-8x39 (50,000 rpm; 266,280 xg); F50L-24x1.5 (50,000 rpm; 280,000 xg); F65L-6x13.5 (65,000 rpm; 324,140 xg).

Benchtop rotors

Choose a Fiberlite benchtop rotor solution for high speed applications including PCR post-reaction cleanup, cell culture, DNA sample preparation, subcellular fractionation and protein identification.

Accelerated application flexibility

Fiberlite

F14-6x250LE F10-6x100 LEX F15-6x100y

- Achieve outstanding g-force without compromising capacity—250 mL up to 18,533 xg; 100 mL up to 24,652 xg—allowing more applications to be done on the benchtop.
- 6x100 options include both steeper angle for more precise small-volume pelletization or higher speeds for more difficult separations. the benchtop.

Conical tube efficiency

Fiberlite F13-14x50cy F15-8x50cy

- Provide generous 14- or 8-place 50 mL conical tube capacity, and g-forces up to 24,446 xg for sample preparation without the need to change tubes.
- Process 15 mL conical tubes with optional adapters for flexibility.

Micro-volume protocol support Fiberlite | F21-48x2

- Run up to 48 tubes at over 25,000 xg, doubling the capacity of conventional rotors and reducing processing by half.
- Provide user convenience with non-corroding, dual-row configuration.

Outstanding microplate processing Fiberlite | H3-LV

- Experience exceptional capacity of 28 standard plates or 8 deep-well plates per run with g-forces up to 2,738 xg.
- Ideal for pelleting cells and cellular debris, protein precipitation and collecting physiological fluids for diagnostic testing.





Figure 13. Easy and secure push-button Auto-Lock rotor exchange in as little as 3 seconds for application versatility and cleaning convenience.

Specifications/Ordering information

Rotors			sc	Cat. no.	Related centrifuge	Max	Max RCF (xg)
		C			Thermo Scientific	speed (rpm)	
Sorvall LYNX S	Superspeed rotors v	vith A	uto-	Lock			
Carlos Ca	Fiberlite F9-6x1000 LEX		×	096-061075	Sorvall LYNX 6000	9,000	17,568
C.C.P.	Fiberlite F10-4x1000 LEX		×	096-041075	Sorvall LYNX 6000, 4000	10,500	20,584
Terrs Press Press	Fiberlite F12-6x500 LEX		×	096-062375	Sorvall LYNX 6000, 4000	12,000	24,471
There is	Fiberlite F14-6x250y		×	096-062075	Sorvall LYNX 6000, 4000	14,000	30,240
See	Fiberlite			� 096-145075	Sorvall LYNX 6000	14,000	33,746
Page 1	F14-14x50cy				Sorvall LYNX 4000	13,000	29,097
	Fiberlite			096-124375	Sorvall LYNX 6000	20,000	51,428
Thermo	F20-12x50 LEX		*		Sorvall LYNX 4000	18,000	41,657
(3.20	Fiberlite				Sorvall LYNX 6000	20,000	47,850
Thermot	F21-8x50y		*	096-084275	Sorvall LYNX 4000	18,000	38,759
A STATE OF STATE	Fiberlite			096-484075	Sorvall LYNX 6000	23,000	57,368
	F23-48x1.5				Sorvall LYNX 4000	18,500	37,116

C = Conical tubes SC = Sample containment 🚸 Biocontainment certification by Public Health England, Porton Down, UK.

Rotors			sc	Cat. no.	Related centrifuge		Max	Max
		C			Thermo Scientific	Beckman [™]	speed (rpm)	RCF (xg)
Legacy Supers	peed RC series rot	ors						
					Sorvall™ RC 6™ Plus		9,500	16,880
1	Fiberlite F10-4x1000 LEX			096-041053	Sorvall [™] Evolution [™] RC series		9,000	15,150
and a second	TIO ANTOOD LEA				Sorvall RC-5, RC-2 series		7,000	9,160
	Fiberlite F12-6x500 LEX			096-062185	Sorvall RC 6 Plus, Evolution RC series		12,000	24,500
Time V	1 12-02300 LEA				Sorvall RC-5, RC-2 series		10,000	17,000
	Fiberlite F14-6x250y		×	78500	Sorvall RC 6 Plus, Evolution RC, RC-6, RC-5, RC-2 series		14,000	30,100
	Fiberlite F13-14x50cy		×	46922	Sorvall RC 6 Plus, RC-5, RC-2 series		13,000	29,000
0 Hereitan Hereitan	Fiberlite F20-6x100			096-064025	Sorvall RC 6 Plus, RC-5, RC-2 series		20,000	43,900
	Fiberlite F21-8x50y		*	46923	Sorvall RC 6 Plus, RC-5, RC-2 series		20,000	47,500
Parma Barr	Fiberlite F21-48x1.5			096-484020	Sorvall RC 6 Plus, RC-5, RC-2 series		20,000	43,500
JItraspeed roto	ors							
Term Term	Fiberlite F37L-8x100			096- 08056	Sorvall WX series	L8 series	37,000	182,460
	Fiberlite F50L-8x39			096-087051	Sorvall WX series	L8 series	50,000	266,280
There is a set of the	Fiberlite F65L-6x13.5			096-067135	Sorvall WX series	L8 series	65,000	324,140
	Fiberlite F50L-24x1.5			096-247028	Sorvall WX series	L8 series	50,000	280,000

C = Conical tubes SC = Sample containment 🔶 Biocontainment certification by Public Health England, Porton Down, UK.

Rotors			00	Cat. no.	Related centrifuge	Max	Max
		C	SC		Thermo Scientific	speed (rpm)	RCF (xg)
Benchtop rotor	′S						
	Fiberlite F14-6x250 LE		×	75003662	Sorvall [™] Legend [™] XT, Heraeus [™] Multifuge [™] X3, SL 40F series	10,000 11,000 ^[9]	15,317 18,533 [®]
	Fiberlite		*	75003340	Sorvall Legend X1/XT, Heraeus Multifuge X1/X3, SL 40F series	10,500	15,038
	F10-6x100 LEX				Sorvall ST 16/40, Heraeus [™] Megafuge [™] 16/40, SL 16/40 series	10,500	15,038
	Fiberlite			75000000	Sorvall Legend X1/XT, Heraeus Multifuge X1/X3, SL 40F series	15,500	24,652
F15-6x100y		*	75003698	Sorvall ST 16/40, Heraeus [™] Megafuge [™] 16/40, SL 16/40 series	13,000	18,516	
Fiberlite F13-14x50cy	-		75003661	Sorvall Legend X1, Heraeus Multifuge X1 series	8,500	12,359	
				Sorvall Legend XT, Heraeus Multifuge X3, SL 40F series	9,250 10,000 ^[9]	14,636 17,105 ^{19]}	
			75006526	Sorvall Legend T, Heraeus Multifuge 3 series	9,250 10,000 ^[9]	14,636 17,105 ^[9]	
			æ	75000000	Sorvall Legend XT, Heraeus Multifuge X3, SL 40F series	14,500	24,446
Fiberlite F15-8x50cy	-	*	75003663	Sorvall Legend X1, Heraeus Multifuge X1	14,000 14,500 ^{i9j}	22,789 24,446 ^[9]	
				75006516	Sorvall Legend T, Heraeus Multifuge 3 series	12,000 14,500 ^{i9j}	16,741 24,446 ^[9]
	Fiberlite F21-48x2		×	75003664	Sorvall Legend X1/XT, Sorvall ST 16/40, Heraeus Multifuge X1/X3, Heraeus Megafuge 16/40, SL 16/40, SL 40F series	15,200	25,055
				75006527	Sorvall Legend T, Heraeus Multifuge 3 series	15,000	24,400
	Fiberlite H3-LV			75003665	Sorvall Legend X1/XT, Sorvall ST 16/40, Heraeus Multifuge X1/X3, Heraeus Megafuge 16/40, SL 16/40, SL 40F series	3,600	2,738

9 With 230 V centrifuge. C = Conical tubes SC = Sample containment 🚸 Biocontainment certification by Public Health England, Porton Down, UK.

 \bigstar Biocontainment certification pending testing completion September 2018

Perfect fit

Select Fiberlite rotors come complete with an initial set of bottles and tubes

Thermo Scientific bottles and tubes	Nominal capacity ^[7] per cavity	Description	Cat. no.	Fiberlite rotor
	1000 mL (1 L)	Fiberlite High Performance Bottle, PPCO, with Nylon cap and PP GF plug	010-1491	F9-6x1000 LEX (17,568 xg) F10-4x1000 LEX (20,584 xg)
	500 mL	Fiberlite High Performance Bottle, PPCO, with PP GF cap and plug	010-1493	F12-6x500 LEX (24,471 xg)
	250 mL	Fiberlite High Performance Bottle, PPCO, with PP GF cap and plug	010-1495	F14-6x250y (30,240 xg)
Ő	50 mL	Nalgene Oak Ridge Tube, PPCO, with Polypropylene sealing cap	3139-0050	F21-8x50y (47,850 xg) F20-12x50 LEX (51,428 xg)

PPC0 = Polypropylene copolymer PP GF = Polypropylene glass filled 7 Actual fill volumes may vary from nominal volume.

Optimize the performance of your centrifuge

It's simple. From 1 L bottles, to 15 and 50 mL conical tubes, to microplates and tissue culture flasks, the versatile selection of Thermo Scientific centrifugation labware works seamlessly with your complete centrifuge and rotor system, bringing together quality and performance.



Thermo Scientific Fiberlite rotor adapters and accessories

Sorvall LYNX Superspeed rotors with Auto-Lock	Legacy Superspeed RC series rotors Benchtop rotors	Ultraspeed rotors		
Fiberlite rotor (Cat. No.)	Adapter description ^m	No. of vessels per adapter	Cat. No.	
E01 9:20 (006 0070E1)	39 mL Ultraspeed	- 1	010-1142	
50L-8x39 (096-087051)	50 mL	1	010-1142	
	30 mL Oak Ridge Tube	1	010-0167	
	16 mL Oak Ridge Tube	1	010-0382	
20-12x50 LEX (096-124375)	15 mL Conical Tube	1	010-1123	
21-8x50y (096-084275)	10 mL Oak Ridge Tube	1	010-1306	
21-8x50y (46923)	10 mL BD Vacutainer [™] Tube	1	010-1068	
	3 mL BD Vacutainer Tube	1	010-1128	
	1 mL BD Microtainer [™] Tube	3	010-1127	
	50 mL Conical 50 mL Oak Ridge Tube	1	010-0377	
14-14x50cy (096-145075)	30 mL Oak Ridge Tube	1	010-0377	
13-14x50cy (46922)	16 mL Oak Ridge Tube	1	010-0376	
13-14x50cy (40922)	15 mL Conical Tube	1	75100378	
13-14x30Cy (73000320)	15 mL Millipore [™] Filtration Device	1	010-1340	
	10 mL Oak Ridge Tube	1	010-1311	
	10 mL BD Vacutainer Tube	1	010-1124	
	100 mL		010 1121	
	50 mL Oak Ridge Tube	1	75003102[10]	
	50 mL Conical Tube	1	75003103[10]	
	30 mL Oak Ridge Tube	1	75003094[10]	
	16 mL Oak Ridge Tube	1	76002906	
20-6x100 (096-064025)	15 mL Conical Tube	1	75003095	
15-6x100y (75003698)	10 mL Oak Ridge Tube	1	75003093[10]	
10-6x100 LEX (75003340)	10 mL BD Vacutainer Tube	1	010-1274	
	6.5 mL Round Bottom Tube	2	750030921	
	3 mL BD Vacutainer Tube	3	010-1126	
	1.5/2 mL Microtube	4	75003091[10]	
	1 mL BD Microtainer Tube	6	010-1125	
	100 mL Ultraspeed			
37L-8x100 (096-08056)	39 mL Tube	1	010-0189	
	13.5 mL Tube	1	010-0191	
	250 mL 100 mL Oak Ridge Tube	1	010-1119	
	50 mL Conical Tube	1	75100136	
	50 mL Oak Ridge Tube	1	010-0138	
14-6x250y (096-062075)	30 mL Oak Ridge Tube	2	010-0138	
14-6x250y (78500)	16 mL Oak Ridge Tube	5	010-1072	
14-6x250 LE (75003662)	15 mL Corning [™] Conical	5	75101073	
	15 mL Conical Tube	5	010-1410	
	10 mL Oak Ridge Tube	7	010-1309	
	10 mL BD Vacutainer Tube	7	010-1117	
	3 mL BD Vacutainer Tube	10	010-1138	
	500 mL			
	250 mL Conical Tube	1	010-1135	
	250 mL Oak Ridge Tube	1	010-0151	
	175 mL Nalgene Conical Bottle	1	010-0152	
	100 mL Oak Ridge Tube	1	010-1114	
	50 mL Conical Tube	1	010-1102	
12-6x500 LEX (096-062375	e e e e e e e e e e e e e e e e e e e	2	010-1112	
12-6x500 LEX (096-062185)		3	010-1115	
	16 mL Oak Ridge Tube	7	010-1105	
	15 mL Conical Tube	6	010-1099	
			010-1308	
	10 mL Oak Ridge Tube	7		
	10 mL Oak Ridge Tube 10 mL BD Vacutainer Tube	7	010-1103	
	10 mL Oak Ridge Tube 10 mL BD Vacutainer Tube 3 mL BD Vacutainer Tube			
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	10 mL Oak Ridge Tube 10 mL BD Vacutainer Tube 3 mL BD Vacutainer Tube 1000 mL 500 mL Oak Ridge Tube 250 mL Conical Tube	7 14 1 1	010-1103 010-1137 010-0145 010-1096	
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	10 mL Oak Ridge Tube 10 mL BD Vacutainer Tube 3 mL BD Vacutainer Tube 1000 mL 500 mL Oak Ridge Tube 250 mL Conical Tube 250 mL Oak Ridge Tube 175 mL Nalgene Conical Bottle 100 mL Oak Ridge Tube 50 mL Oak Ridge Tube 50 mL Oak Ridge Tube 50 mL Oak Ridge Tube	7 14 1 1 1 1 3 5 7	010-1103 010-1137 010-0145 010-1096 010-0150 010-1132 010-1093 010-0180 010-0191	
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10-4x1000 LEX (096-04107	10 mL Oak Ridge Tube 10 mL BD Vacutainer Tube 3 mL BD Vacutainer Tube 1000 mL 500 mL Oak Ridge Tube 250 mL Oak Ridge Tube 250 mL Oak Ridge Tube 175 mL Nalgene Conical Bottle 100 mL Oak Ridge Tube 500 mL Oak Ridge Tube 50 mL Oak Ridge Tube 16 mL Oak Ridge Tube 31 fmL Oak Ridge Tube	7 14 1 1 1 1 3 5 7 7 7 15	010-1103 010-1137 010-0145 010-1096 010-0150 010-1132 010-1093 010-0180 010-0191 010-1095 010-1087	
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