

# One Liter Bottles for Large Volume Centrifuge Rotors

*Used with Beckman Coulter HarvestLine Disposable Liners*

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Thermo Fisher Scientific, Rochester, N.Y., has introduced Thermo Scientific Nalgene super-speed one liter double-seal bottles. Nalgene® one liter bottles are thick-walled polycarbonate or polypropylene bottles that are sealed by a gasket seated between a dual-seal crown to enhance chemical resistance and prevent leakage during centrifugal separation. The bottles have a total capacity of 1,000 mL and are recommended for use in the Thermo Scientific Fiberlite four- and six-liter carbon fiber rotors.

The bottles have been tested successfully at maximum filled levels in Fiberlite® large volume rotors. The combined benefits of a light-weight carbon fiber rotor and the ease of use of the Nalgene super-speed bottles are obvious. With a large outer diameter and wide mouth, the bottle allows easy access to the contents. Both polycarbonate and polypropylene bottles are washable and autoclavable, allowing them to be reused over several consecutive centrifugation procedures.

These bottles can also be used with the Beckman Coulter HarvestLine™ disposable liners in the large volume rotors for the Thermo Scientific Sorvall RC 6 Plus Super Speed or the Sorvall® Evolution™ RC centrifuges at maximum rotor speeds to further enhance sample recovery.

Thermo Scientific Nalgene 1 Liter super-speed centrifuge bottles increase your productivity with safe, reliable performance. Spin multi-liter volumes at centrifugal forces up to 15,810 x G.

See the difference high volume can make in your lab. Available in crystal clear or chemical resistant materials, and fits most rotors and floor model centrifuges.

Depend on quality that meets USP Class VI and ISO standards. Non-cytotoxic and autoclavable.

## Applications

- Pelleting particulate materials and debris from plant and mammalian tissue homogenates
- Collecting bacteria, yeast, or virus incubated in tissue culture or growth media from fermentation tanks
- Clean-up debris or collecting marine life forms from water pollution studies
- Differential centrifugation of subcellular organelles from tissue homogenate

## Example

Preparative scale isolation of *E. coli*

10L Luria-Bertani broth (LB) was inoculated with *E. coli* containing the plasmid pBR322 and incubated overnight at 37°C with vigorous shaking. After ~24 hours the media was transferred into HarvestLine disposable liners (Liner Kit 369264) which were then placed into Nalgene superspeed 1L polycarbonate centrifuge bottles. Bottles with liners were sealed and configured into either Fiberlite F8 (6 x 1L) or Fiberlite F9 (4 x 1L) rotors. Centrifugal separation proceeded at 4°C and 8,500 rpm (15,810 x g) or 9,000 rpm (15,180 x g) for the Fiberlite F8 and F9 rotors respectively for 10-15 minutes. When complete, the bottles were removed and unsealed. The HarvestLine liners allowed the entire contents of the bottle to be removed while leaving no residue inside the bottles. Supernatants could be easily removed or the entire preparation stored in the freezer for later processing.



Thermo Scientific Nalgene 1L Super-speed Centrifuge Bottles  
[www.NalgeneLabware.com/centrifuge](http://www.NalgeneLabware.com/centrifuge)

Nominal Capacity	Description	Nalgene Cat. No.	Replaces Sorvall Cat. No.	Closure Style	Nominal Dim. Dia x Height, mm	Max RCF at 4°C and 22°C	Beckman Coulter Cat. No.
1L	1L SuperSpeed Bottle, PC; SCA, PP	3140-1006	76964	Sealing Cap	97.5 x 195.3	15,810	363676
1L	1L SuperSpeed Bottle, PPCO; SCA, PP	3141-1006	76968	Sealing Cap	97.5 x 195.3	15,810	363678
500 ml	500ml Oak Ridge Bottle, PC; SCA, PP	3140-0500	03944	Sealing cap	69.5 x 160.0	24,336	355605
500 ml	500ml Oak Ridge Bottle, PPCO; SCA, PP	3141-0500	03943	Sealing cap	69.5 x 160.0	24,336	355607
250 ml	250ml Oak Ridge Bottle, PC; SCA, PP	3140-0250	03939	Sealing cap	61.5 x 135.1	27,500	356013
250 ml	250ml Oak Ridge Bottle, PPCO; SCA, PP	3141-0250	03937	Sealing cap	60.7 x 133.4	27,500	365011
50 ml	50ml Oak Ridge Tube, PC; SCA, PP	3138-0050	03480	Sealing cap	28.8 x 107.0	50,000	
50 ml	50ml Oak Ridge Tube, PPCO; SCA, PP	3139-0050	03530	Sealing cap	28.8 x 106.7	50,000	357003

In addition to these offices, Thermo Fisher Scientific maintains a network of representative organizations throughout the world.

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Thermo Scientific RC6 Plus (left) Evolution RC (right) Centrifuges and Fiberlite Carbon Fiber Rotors  
[www.thermo.com](http://www.thermo.com)

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