## **Bottles**

### NALGENE bottles... you can't beat the system.

Closure is one-piece, linerless. Works with the bottle to create a guaranteed leakproof system.

Shrink Ring at the neck, of most NALGENE bottles is molded so the inside surface is smooth, minimizing content entrapment.

Heavy-Duty Uniform – Walls\* are generally thicker and very resistant to splitting or puncturing.

Bottom has curved inner corners for easy cleaning. Stable base has permanent, molded-in resin code and volume.

\*Unlike many competitve plastic bottles, most NALGENE bottles (up to four liters) are injection blow-molded. This allows more precise molding of the neck area and chamfer and more consistent wall thickness distribution. Injection blow-molded bottles feature a smoother, more stable bottom with less molded-in stress for greater product reliability. There are no pinch-offs to cause creases or splits which could harbor contaminants.

Seal Ring is molded inside the closure. Fits tightly against the beveled inner edge (chamfer) of the bottle neck. This makes the NALGENE bottle a leakproof system. No closure liner to wear, crease or cause contamination.

Threads on bottles and closures have continuous, straight-shouldered semibuttress threads, not low-quality round threads,

NALGENE bottle neck design and square media bottles with arched shoulders are covered by U.S Trademarks. See individual product listings.

NALGENE®



500 ml

16 oz.

NALGENE bottles - better than glass because they're lighter weight and give better protection against leakage, breakage and contamination. If you find a NALGENE bottle or carboy that we say is leakproof and it isn't, tell us and we'll replace it. That's the NNI guarantee.

NALGENE bottles and carboys are leakproof at ambient temperature and pressure when used with their NALGENE closures, except as noted in individual listings for certain materials and designs

# Testing proves the unique NALGENE closure/bottle system is leakproof.

Leak testing bottles, carboys and other containers with closures smaller than 100 mm (except jars with screw closures)

A standard test closure, with a fitting to allow pressure application, is screwed onto a randomly selected production container. The container is filled with water and inverted. Pressure of 2 psig (a greater pressure differential than the products are likely to experience in actual service) is applied for two minutes. If no water escapes, the container is leakproof.

Leak testing closures - In a complementary procedure, a fitting to allow pressure application is attached to the bottom of a standard test bottle. Water is added, a closure is screwed on and the container is inverted. Pressure is applied as described above. Closure is checked after two minutes to assure that no water has escaped.

Leak testing bottles, carboys and other containers with large closures (100 mm or 120 mm), and all jars with screw closures - A standard test closure is screwed onto a container filled with water. The container is inverted or laid on its side for 15 minutes. If no water escapes, the container is leakproof.

Closures are tested in a complementary procedure using standard test containers.

Cutting down on contamination -

NALGENE bottles and carboys contain no extenders or plasticizers such as phthalates (except PVC bottles), thus eliminating a source of sample contamination.



#### **Light Transmission in NALGENE® Amber Bottles**

Many chemicals, reagents and media components are light-sensitive. Actinic light, radiation capable of producing a photochemical reaction, is often the concern. In practice, this usually means "near" ultraviolet (UV) or blue visible light. The U.S. Pharmacopoeia 661, Containers, Light Transmission, states that a container intended to provide protection from light, or offered as a "light-resistant" container must comply with requirements for maximum light transmission. USP criteria state that a container greater than 20 ml in size cannot allow more than 10% light transmission for any wavelength between 290 and 450 nanometers, measured every 20 nm. For reference, UV is usually defined as 200 nm to ~375 nm; 400 nm is blue light. We tested NALGENE bottles for light transmission using a SPECTRONIC 601 UV/visible spectrophotometer and found that our amber and opaque bottles definitely pass the USP light transmission test.

Cat. No.	Description	
2004 - all sizes	Amber, narrow-mouth bottles, HDPE	
2009 - all sizes	Amber, rectangular bottles, HDPE	
DS2085 - all sizes	Amber, narrow-mouth environmental sampling bottle, HDPE	
2106 - all sizes	Amber, wide-mouth bottles, HDPE	
DS2185 - all sizes	Amber, wide-mouth environmental sampling bottle, HDPE	
2204 - all sizes	Large, amber, narrow-mouth bottles, HDPE	
1620 - all sizes	Black, narrow-mouth bottles, FEP	
2256 - all sizes	Amber, carboy	

NOTE: NALGENE® LDPE, HDPE, PP and PMP containers can be used for long-term storage, but direct UV exposure should be avoided.



#### Wide-Mouth Bottles, high-density polyethylene; polypropylene screw closure

Durable, general-purpose bottles with countless applications in the lab or field. Translucent, more rigid than LDPE. Wide mouth is easy to fill with dry materials or liquids. Excellent chemical resistance to most acids, bases, and alcohols. Good for freezer use to -100°C. Suitable for shipping liquids. Leakproof

Cat. No.2104	-0001	-0002	-0004	-0008	-0016	-0032	-0048
Cap., ml	30	60	125	250	500	1000	1500
Cap., oz.	1	2	4	8	16	32	48
Closure Size, mm	28	28	38	43	53	63	63
No. per Pkg	12	12	12	12	12	6	6
No. per Case	72	72	72	72	48	24	24



# Large Wide-Mouth Bottles, high-density polyethylene; white polypropylene screw closure

Excellent for dry chemicals or water sampling. Good for freezer use to -100°C Leakproof

Cat. No.2120	-0005	-0010	
Cap., L	2	4	
Cap., gal.	1/2	1	
Cap., L Cap., gal. Closure Size, mm	100	100	
No. per Pkg	1	1	
No. per Case	6	6	

Refer to Bottles/Information section for further information on leakproof testing.



### Wide-Mouth Bottles, low-density polyethylene; polypropylene screw closure

Translucent, flexible, with excellent impact resistance. Better visibility of contents than with HDPE bottles. Excellent chemical resistance to most acids, bases and alcohols. Because LDPE is also extremely low in trace metal content, it's an excellent material for trace metal analysis. Wide mouth is easy to fill. Suitable for shipping liquids. Good for freezer storage to -100°C. Leakproof

Cat. No.2103	-0001	-0002	-0004	-0008		-0032
Cap., ml	30	60	125	250	500	1000
Cap., oz.	1	2	4	8	16	32
Closure Size, mm	28	28	38	43	53	63
No. per Pkg	12	12	12	12	12	6
No. per Case	72	72	72	72	48	24



## A

#### **2105** Wide-Mouth Bottles, polypropylene; polypropylene screw closure

For chemicals, specimens and general use where autoclaving is required. NOTE: Before autoclaving, just set cap or closure on top of the container without engaging the threads. Excellent chemical resistance to most acides, bases and alcohols. Translucent, but offers better clarity than LDPE or HDPE. Autoclavable/Leakproof

Cat. No.2105	-0001	-0002	-0004	-0008	-0016	-0032
Cap., ml	30	60	125	250	500	1000
Cap., oz.	1	2	4	8	16	32
Closure Size, mm	28	28	38	43	53	63
No. per Pkg	12	12	12	12	12	6
No. per Case	72	72	72	72	48	24