Unmatched Portfolio of Products and Services

**PRODUCTS**
- Laboratory Equipment
- Analytical Instruments
- Reagents
- Consumables
- Software

*The world leader in serving science*

**SERVICES**
- e-commerce
- Customer Service
- On-site Service
- Financial Service
- Delivery
Your Partner in Science

Committed to our customers’ goals for better results and greater productivity
Table of Contents

- Products
- Manufacturing processes
- Catalog
- Testing/Certification
- Regulatory Support
- Quality Systems
- Technical Support
- Custom Capabilities
- Main Applications

www.thermoscientific.com/packagingbottles

Thermo Scientific Nalgene Packaging Bottles
High-performance packaging containers for storing and shipping all your critical reagents
Products

Packaging containers molded from many resins including:

• HDPE, LDPE, PPCO, PET, PETG, PC, Teflon
  • Different bottle resins for specific packaging applications

• Multiple sizes, shapes, packaging configurations
  • Packaging container sizes from 0.5 mL to 4 L
  • Round, Square, Rectangular – Narrow and Wide Mouth
  • Bulk & Tray Pack

• Bottles are suitable for all packaging requirements

• Ability to manufacture many products in controlled environments and certify sterility

• PETG Media Bottles are manufactured in ISO Class 7 cleanroom.

Examples of products manufactured in Class 7:
• Nasal Drops, Eye Drops, Cosmetics

Thermo Scientific Nalgene bottles have been used on expeditions to the top of the highest mountains in the world, including the first American woman to summit Mt. Everest.
Products

• Manufacturing processes include:
  • Bottles - IBM, EBM, ISBM
  • Closures and vials – Injection
  • By manufacturing both the container and closure we are able to provide unsurpassed leakproof performance

• Ability to customize products
Manufacturing Processes

- **Injection Molding**
  - Closures, Micro Packaging Vials
- **Injection Blow Molding**
  - Bottles
- **Injection Stretch Blow Molding**
  - PET Bottles
- **Extrusion Blow Molding**
  - Carboys
New Catalog for Your Application Needs

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Testing/Certification - Resins

**Validated Resins**
- USP Class VI
- EP Abnormal Toxicity
- Cytotoxicity
- USP <661>
- Trace Metal Analysis

**Resin information data sheets from resin suppliers**
- Food Grade
- DMF Number
- European Pharmacopoeia
- US Pharmacopoeia
- CONEG, SARA, Prop 65

Only Virgin Resins are used to manufacture Nalgene Packaging Products

Validation Binders containing compliance data and product specifications is available under customer confidentiality agreement.
Testing/Certification - Products

Inspection of product throughout the manufacturing run

• Physical
  • Leak-testing (Bottle and Closure)

• Dimensional
  • Threads
  • Wall Thickness
  • Uniformity

• Visual
  • Clarity
  • Color
Regulatory Support

Change Control
- Customer Notification
- Changes that affect form, fit, function

Specification Review
- Customer specifications

Online product certificates
- Available on Thermoscientific.com Website

Product Specification Sheets
- Dimensional information for all products

Sterilization Validation
- ANSI/AAMI/ISO 11137 guidelines in establishing a gamma irradiation dose level to support SAL $10^{-6}$

Customer Audits of Nalgene Production Facilities
Quality Systems

ISO 13485:2003 registered manufacturing facilities

- This ISO standard relates to Medical Devices and the regulatory environment required to manufacture them
- Inspection of Resins
- Production Quality Control
  - Visual
  - Performance
  - Dimensional
- Non-Conformance Product Disposition
- Microbiological Testing
  - Pyrogen
  - Bioburden
  - RNase/DNase
Technical Support

Complete customer focus

• Live product support via telephone or web
• Product Applications & Selection
• Complaint coordination
• Root Cause Investigation
• Corrective Action Response to Customer

Technical Support
technical.support@thermofisher.com
Custom Capabilities

Special Products – change existing products per customer requirements
• Customer specific catalog numbers
• Minimum run quantities required
• Changes include packaging, manufacturing environment, sterility

Custom Products
• Customer specific product requiring new molds
• Diagnostic and Packaging Products focus
• Formal process within Thermo Fisher Scientific to utilize our broad manufacturing and product experience to help create your unique solution
• We manage project from design through production
Custom Products for In Vitro Diagnostics

Your proven strategic partner for Development and manufacturing in the IVD industry

Known worldwide for superior quality and innovative products, you can depend on Thermo Fisher Scientific to design, develop and manufacture customized solutions tailored to your exacting requirements.

As leaders in leakproof containment systems, diagnostic surfaces and plastic materials, we combine world class manufacturing with industry-leading development practices to deliver innovative system solutions with on-time implementation and delivery.

As your partner, we provide:

- Extensive R&D capabilities
- Global footprint for localized manufacturing
- Product and process validation expertise
- Wide range of development and manufacturing technologies for plastic products
- Supply chain management proficiency
- Quality systems designed to provide support in meeting global regulatory standards.

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THANKS FOR YOUR ATTENTION

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