

DATA SHEET

Purillex® PETG Bottles



Engineered as Process Components for Critical Bioprocessing

Purillex® PETG Bottles are engineered specifically for purity critical life science and bioprocessing workflows, where container performance directly impacts product integrity, process reliability, and regulatory confidence.

Manufactured 100% in the USA within ISO Class 7 cleanrooms, Purillex PETG Bottles combine ultralow particulate performance, engineered closure integrity, and validated manufacturing controls to support consistent performance across upstream, downstream, fill-finish, and QC applications.

Purillex PETG Bottles are process components—not commodity labware.

Uncompromised Protection—Inside and Out

Every Purillex PETG Bottle is supplied with a rugged HDPE lugged closure engineered to deliver a reliable, leak resistant seal without secondary inserts or liners.

The optically clear PETG body:

- Supports confident visual inspection
- Improves labeling accuracy
- Enhances safe handling and pouring

Purillex PETG Bottles demonstrated **100% leak free performance** following multiple freeze/thaw cycles at **-85 °C** and pressurization testing at 2 psi and 10 psi, under both upright and horizontal orientations. Please scroll down to view supporting data or [click here](#) to download the full tech note.

Manufactured for Maximum Purity and Minimal Risk

Purillex PETG Bottles are produced using a precision injection stretch blow molding process, creating consistent, high quality threads without secondary machining.

This design:

- Reduces particulate generation
- Improves dimensional consistency
- Maintains container closure integrity

Each sterile production lot must successfully pass USP <788> particulate testing prior to release. Bottles are inherently durable and shatter-resistant, maintaining performance through routine handling, transport, and cold-chain storage down to -85°C .

Purillex PETG Bottles are compatible with manual and automated filling systems, supporting repeatable, scalable workflows.



High Purity PETG for Sensitive Applications

Purillex PETG bottles are molded from USP Class VI-compliant PETG resin that is:

- Non-pyrogenic
- Non-cytotoxic
- Low in leachables and extractables

PETG provides excellent optical clarity and favorable gas barrier properties. Purillex bottles offer superior CO_2 and O_2 barrier performance, helping maintain pH stability and media integrity over extended storage and staging times. Chemical compatibility documentation can be found [here](#).

Sterile Confidence You Can Count On

Purillex PETG Bottles are available in five sizes: 100 mL, 250 mL, 500 mL, 1000 mL and 2000 mL. All bottles include molded graduations and HDPE closures. Additional sterilization configurations include:

- Validated to a Sterility Assurance Level (SAL) of 10^{-6}
- Terminally sterilized by gamma irradiation, validated 20-50 kGy
- Supported by a 5-year shelf life from date of manufacture

Packaging That Protects the Process

Purillex PETG Bottles are packaged to support controlled transfer into clean environments:

- Bottles nested on shrink-wrapped trays
- Trays stacked and double-bagged
- Shipped in labeled, recyclable corrugated cartons

Packaging design supports efficient handling, traceability, and reduced contamination risk during staging and inventory management.

Documentation and Traceability

Each shipment includes a **Certificate of Conformance**.

Sterile lots additionally include a **Certificate of Processing**, supporting full traceability and confidence for GMP and regulated environments.

Validation summaries, extractables data, and testing documentation are available upon request.

Product Configurations

- ✓ Part numbers, sizes, closures, pack quantities
- ✓ Tamper evident options
- ✓ Closure rings and accessories

Freeze, Thaw, and Leak Testing Summary

Purillex PETG bottles were evaluated under multiple conditions representing real world handling and storage.

Test conditions included:

- Fill volumes: 80–100%
- Orientations: upright and horizontal
- Pressurization: 2 psi and 10 psi
- Temperature exposure: freeze/thaw to –85 °C

Result: All tested configurations passed leak testing with no observed failures. View the full tech note [here](#) on the Savillex website.

Designed to Reduce Manufacturing Risk

As process value increases, tolerance for container failure decreases.

Purillex PETG Bottles are engineered to help teams:

- Reduce contamination risk
- Improve lot-to-lot consistency
- Protect high value media and materials
- Support regulatory readiness

The lowest cost bottle is not always the lowest risk decision.

Why Savillex?

Savillex develops high-purity fluid handling solutions for critical applications across life sciences and advanced manufacturing.

With deep expertise in polymer science, cleanroom manufacturing, and engineered purity systems, Savillex helps customers reduce risk and operate with confidence when failure is not an option.



SUPPORTING DATA - TEMPERATURE RANGE

MATERIAL	STERILIZATION METHOD	STORAGE TEMPERATURE RANGE	WORKING TEMPERATURE RANGE
PETG	Gamma irradiation	59°F to 77°F (15°C to 25°C)	-121°F to 158°F (-85°C to 70°C)

SUPPORTING DATA - FREEZE CYCLE TESTING

SAMPLE	FILL VOLUME	ORIENTATION	2 PSI LEAK TEST	10 PSI LEAK TEST
125-1	80%, 100 mL	Right side up	Pass	Pass
125-2	80%, 100 mL	Right side up	Pass	Pass
125-3	80%, 100 mL	Right side up	Pass	Pass
125-4	100%, 125 mL	Right side up	Pass	Pass
125-5	100%, 125 mL	Right side up	Pass	Pass
125-6	100%, 125 mL	Right side up	Pass	Pass
125-7	100%, 125 mL	On side	Pass	Pass
125-8	100%, 125 mL	On side	Pass	Pass
125-9	100%, 125 mL	On side	Pass	Pass
250-1	80%, 200 mL	Right side up	Pass	Pass
250-2	80%, 200 mL	Right side up	Pass	Pass
250-3	80%, 200 mL	Right side up	Pass	Pass
250-4	100%, 250 mL	Right side up	Pass	Pass
250-5	100%, 250 mL	Right side up	Pass	Pass
250-6	100%, 250 mL	Right side up	Pass	Pass
250-7	100%, 250 mL	On side	Pass	Pass
250-8	100%, 250 mL	On side	Pass	Pass
250-9	100%, 250 mL	On side	Pass	Pass
500-1	80%, 400 mL	Right side up	Pass	Pass
500-2	80%, 400 mL	Right side up	Pass	Pass
500-3	80%, 400 mL	Right side up	Pass	Pass
500-4	100%, 500 mL	Right side up	Pass	Pass
500-5	100%, 500 mL	Right side up	Pass	Pass
500-6	100%, 500 mL	Right side up	Pass	Pass
500-7	100%, 500 mL	On side	Pass	Pass
500-8	100%, 500 mL	On side	Pass	Pass
500-9	100%, 500 mL	On side	Pass	Pass
1000-1	80%, 800 mL	Right side up	Pass	Pass
1000-2	80%, 800 mL	Right side up	Pass	Pass
1000-3	80%, 800 mL	Right side up	Pass	Pass
1000-4	100%, 1000 mL	Right side up	Pass	Pass
1000-5	100%, 1000 mL	Right side up	Pass	Pass
1000-6	100%, 1000 mL	Right side up	Pass	Pass
1000-7	100%, 1000 mL	On side	Pass	Pass
1000-8	100%, 1000 mL	On side	Pass	Pass
1000-9	100%, 1000 mL	On side	Pass	Pass

BOTTLE ORDERING INFORMATION

PART #	DESCRIPTION	CLOSURE	QUANTITY
160-04-0125-S	125 mL Purillex PETG Square Media Bottle, Sterile	38-430	24/tray; 4 trays/case
160-04-0125	125 mL Purillex PETG Square Media Bottle, Non-Sterile	38-430	24/tray; 4 trays/case
160-04-0250-S	250 mL Purillex PETG Square Media Bottle, Sterile	38-430	30/tray; 2 trays/case
160-04-0250	250 mL Purillex PETG Square Media Bottle, Non-Sterile	38-430	30/tray; 2 trays/case
160-04-0500-S	500 mL Purillex PETG Square Media Bottle, Sterile	38-430	20/tray; 2 trays/case
160-04-0500	500 mL Purillex PETG Square Media Bottle, Non-Sterile	38-430	20/tray; 2 trays/case
160-04-1000-S	1000 mL Purillex PETG Square Media Bottle, Sterile	38-430	12/tray; 2 trays/case
160-04-1000	1000 mL Purillex PETG Square Media Bottle, Non-Sterile	38-430	12/tray; 2 trays/case
160-04-2000-S	2000 mL Purillex PETG Square Media Bottle, Sterile	38-430	6/tray; 2 trays/case
160-04-2000	2000 mL Purillex PETG Square Media Bottle, Non-Sterile	38-430	6/tray; 2 trays/case
160-04-0125-LP	125 mL Purillex PETG Square Media Bottle, Heat-Shrink Band, Sterile	38-430	24/tray; 2 trays/case
160-04-0250-LP	250 mL Purillex PETG Square Media Bottle, Heat-Shrink Band, Sterile	38-430	30/tray; 1 tray/case
160-04-0500-LP	500 mL Purillex PETG Square Media Bottle, Heat-Shrink Band, Sterile	38-430	20/tray; 1 tray/case
160-04-1000-LP	1000 mL Purillex PETG Square Media Bottle, Heat-Shrink Band, Sterile	38-430	12/tray; 1 tray/case
160-04-2000-LP	2000 mL Purillex PETG Square Media Bottle, Heat-Shrink Band, Sterile	38-430	6/tray; 1 tray/case
670-038-05-PK	38-430 HDPE Retaining Ring - Pack of 10	38-430	Pack of 10
670-038-05-CS	38-430 HDPE Retaining Ring - Case of 100	38-430	Case of 100
670-053-05-PK	53B HDPE Retaining Ring, 10 Pack	53B	Pack of 10
670-053-05-CS	53B HDPE Retaining Ring, 100 Pack	53B	Case of 100

[Click here](#) for more information on Purillex PETG Bottles and to request your complimentary sample.

