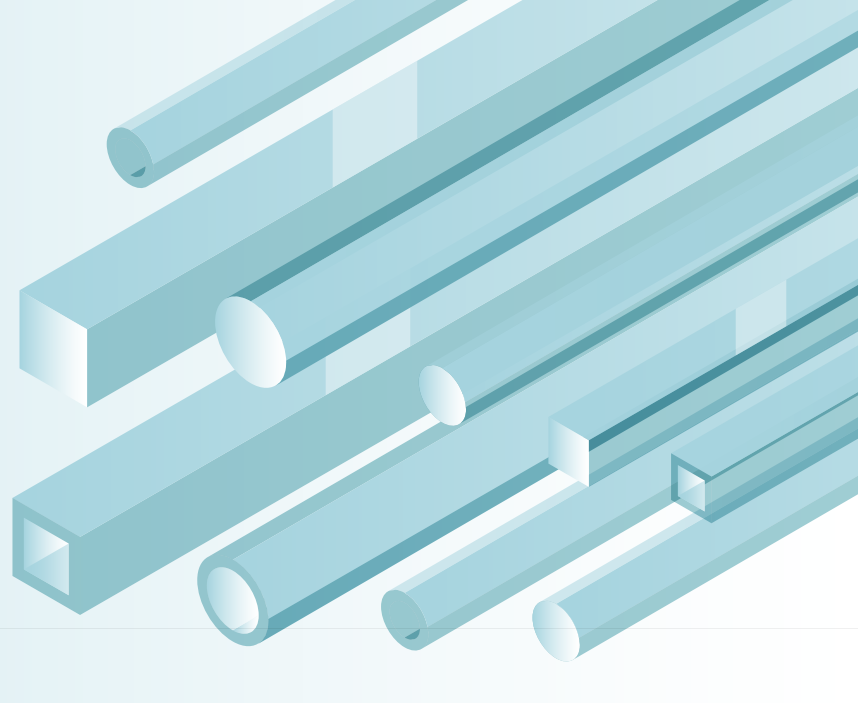


Glass vs. Plastic: The Clear Choice for Scientific Products

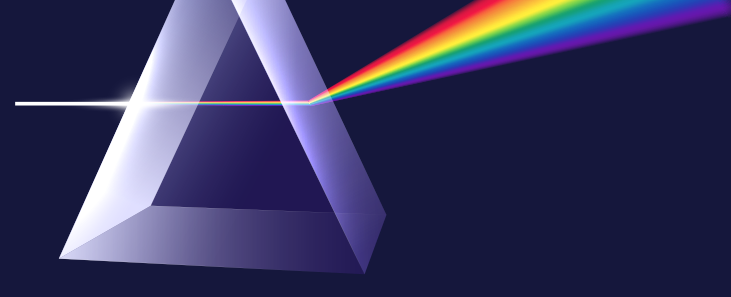
When it comes to scientific products like **cuvettes**, **flow cells**, **light pipes**, **prisms**, **lenses**, and **precision glass capillary tubes**, the initial cost savings of plastic can be tempting. However, for serious scientific work, **high performance glass offers superior performance and long-term value** that plastic simply can't match.



Why Glass is the Better Solution

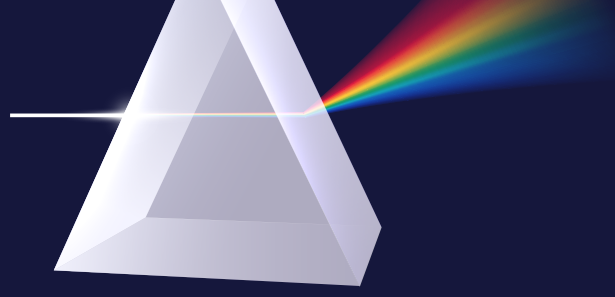
1. Unmatched Optical Performance

Clarity & Transmission



Glass

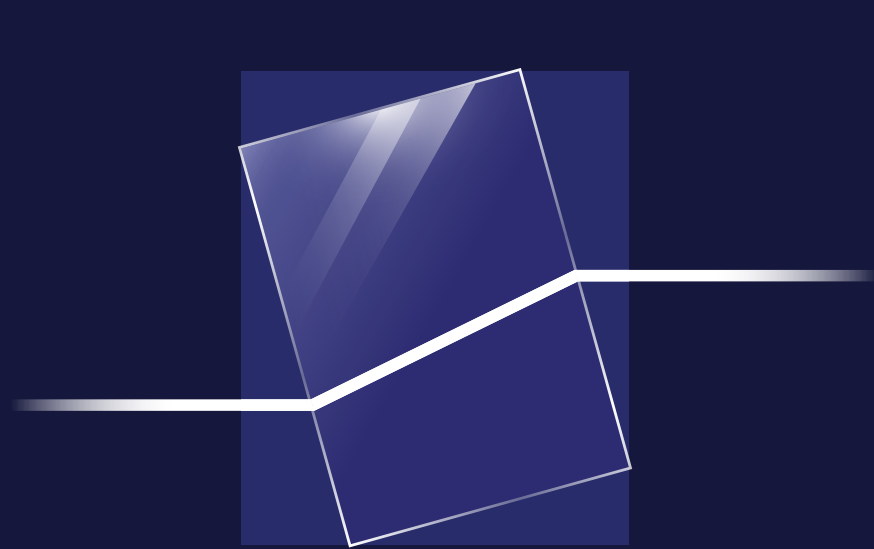
Glass provides crystal-clear vision and high light transmission across the UV-Vis-IR spectrum.



Plastic

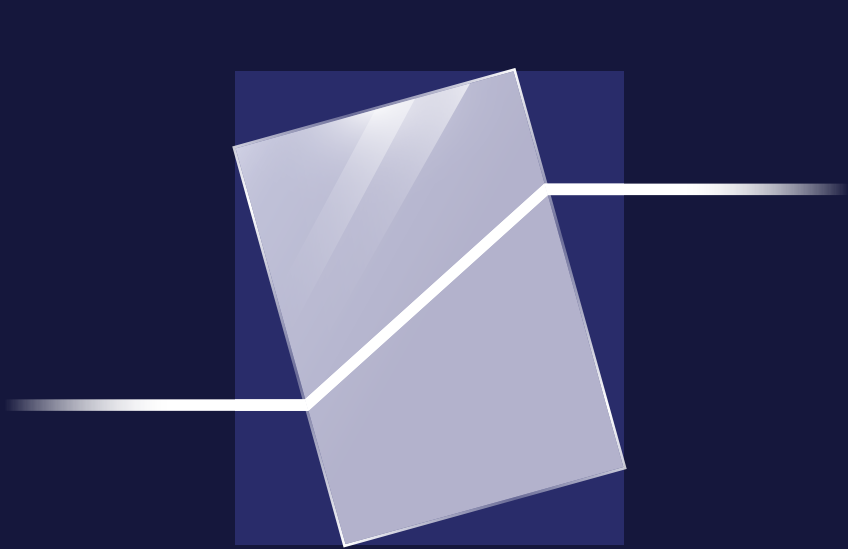
Plastic often suffers from lower UV transmission, autofluorescence, and haze, compromising accurate measurements in **cuvettes**, **flow cells**, and **optical components**.

Precision



Glass

Glass maintains a stable refractive index, crucial for the precise alignment and consistent results needed in **lenses**, **prisms**, and **light pipes**.



Plastic

Plastic's refractive index can fluctuate with temperature or stress, leading to optical distortions.

2. Superior Chemical Resistance & Inertness

Broad Compatibility



Glass

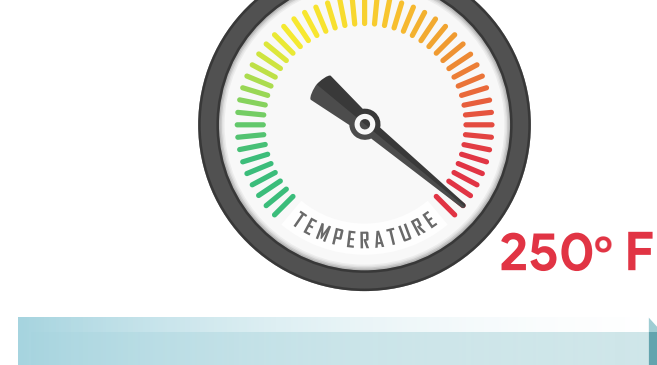
Glass resists aggressive chemicals, solvents, acids, and bases without degrading or leaching contaminants.



Plastic

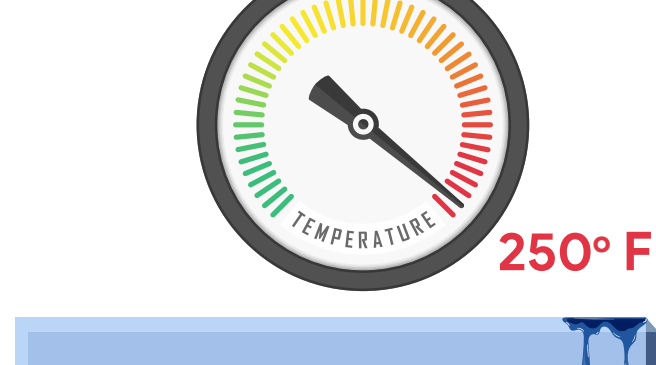
Plastic can leach extractables into samples or adsorb analytes, leading to contamination and inaccurate results, especially critical for **cuvettes**, **precision glass capillary tubes** and **flow cells** handling sensitive samples.

Sterilization



Glass

Glass withstands harsh cleaning protocols and high-temperature sterilization (autoclaving), ensuring thorough decontamination and reusability.



Plastic

Most plastics cannot, limiting cleaning options and increasing cross-contamination risks for **all labware**.

3. High Thermal Stability & Durability

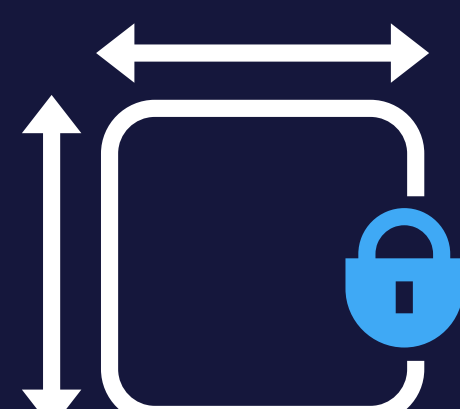


Temperature Resistance

Glass handles extreme temperature changes without deforming, vital for **precision glass capillary tubes** in PCR or **flow cells** with temperature-controlled reactions. Plastic has a much lower thermal tolerance.

Dimensional Stability

Glass holds its precise shape over time. This is critical for the accurate inner diameters of **capillary tubes** and the precise optics of **lenses** and **prisms**. Plastic can creep or warp, impacting precision.



Scratch Resistance



Glass is significantly harder and more scratch-resistant than plastic, maintaining the clarity and performance of **cuvettes** and **optical components** even after repeated cleaning.

Understanding Long-Term Value (Total Cost of Ownership)

While plastic may seem cheaper upfront, consider the hidden costs:



Inaccurate data leading to repeated experiments.



Wasted expensive reagents due to contamination or poor performance.



Frequent replacements due to material degradation.



Increased downtime for recalibration or component swaps.

Glass provides reliability, reproducibility, and a longer lifespan, ultimately saving you time and money.

Make the Smart Investment

Choose glass for your custom scientific products to ensure **superior performance**, **data integrity**, and **long-term value**. It's an investment in the accuracy and success of your scientific endeavors.



Glass is your eco-friendly choice.



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