

## Can UV Light Pass Through PTFE Tubing - FAQ

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In general, PTFE (Polytetrafluoroethylene) is known for its excellent resistance to UV radiation, thanks to its transparency across most UV wavelengths. It reflects a significant portion of UV energy and only begins to absorb and degrade at very short wavelengths—specifically below 240 nm—where high-energy photons can break surface chemical bonds.

### Key Takeaways:

- Thin walled tubing may allow more UV Light to pass through especially at longer wavelengths.
- Thinner walled tubing may increase UV transmission but still susceptible to localized damage under intense UV exposure.
- PTFE tubing will strongly absorb UV light below 240 nm, which can lead to degradation of the tubing due to localized heating and photothermal effects.
- As the wavelength increases, absorption and degradation decrease. No degradation occurs at wavelengths above 400 nm.

Click [HERE](#) for PTFE Tubing Ordering Information.

**NOTE:** While PTFE tubing is generally considered to be UV-resistant, exposure to intense UV sources such as excimer lasers can lead to localized photothermal degradation. This alters the surface morphology and is influenced by PTFE's semi-crystalline microstructure, which can trap photons and scatter light, affecting the extent and nature of the damage.