

**Teflon tape**, officially known as **PTFE (polytetrafluoroethylene) thread seal tape** or plumber's tape, is a non-stick, film-like material used to **lubricate and seal threaded pipe connections** to prevent fluid and gas leaks. It works as a deformable filler that molds into the microscopic gaps between male and female pipe threads. This creates a watertight and airtight friction seal without hardening or gluing the parts permanently. [[1](#), [2](#), [3](#), [4](#), [5](#)]

## Essential Rules for Application

Proper application is critical; applying it incorrectly will cause the tape to unwrap inside the fitting and leak. [[1](#), [2](#), [3](#), [4](#), [5](#)]

- **Direction:** Always wrap the tape in a **clockwise direction** around the male thread (with the pipe facing you). This ensures the tape tightens into the joint when you screw the matching fitting on. [[1](#), [2](#), [3](#)]
- **Tension:** Pull the tape taut so it stretches tightly and nests directly into the grooves of the threads. [[1](#), [2](#)]
- **Layering:** Apply **3 to 5 full wraps** for standard water connections. Thinner brands may require slightly more layers. [[1](#), [2](#), [3](#), [4](#)]
- **Placement:** Leave the **very first thread at the pipe tip completely exposed**. This prevents loose strands from tearing off and clogging valves, water purifiers, or downstream equipment. [[1](#), [2](#), [3](#), [4](#)]