

## Connections | Vespel<sup>®</sup>-graphite

We manufacture a wide variety of standard and specialty ferrules and seals used in gas chromatographs and other instruments. The commonly used materials are Vespel<sup>®</sup>, PTFE, and exfoliated graphite.

The standard ferrule product line is used to seal tubing and capillaries to standard compression fittings in a variety of sizes.



### Features and benefits

- Made from polyimide/graphite blended compounds.
- They seal with minimal torque and can be reused and repositioned along capillary columns if not over-compressed in the fitting.
- Due to slight shrinking at high temperatures, they must be retightened after initial temperature cycles to avoid leaks.
- Two types of Vespel/graphite are commonly used, one with 40% graphite and one with 15% graphite.

### Recommended applications

They are ideal for GC/MS interface applications because they are non-porous to oxygen.

### Product specifications

Graphite increases high-temperature tolerance, and reduces sticking and shrinking. They can be reused and repositioned along capillary columns if not over-compressed in the fitting. The 60/40 V/G blend will have the lowest chance of bonding. Because they are softer than 100% Vespel, only gentle force is needed to compress them and form a seal. They are both rated to 400°C.

The 60/40 blend has enhanced wear resistance, lower friction, and improved dimensional and anti-oxidation stability compared with the 85/15 blend, which is harder.

*Vespel<sup>®</sup> is a registered trademark of DuPont.*

For more information about this product visit [www.trajanscimed.com](http://www.trajanscimed.com) or contact [techsupport@trajanscimed.com](mailto:techsupport@trajanscimed.com)