



Vespel®

VESPEL parts provide a unique combination of the physical properties of plastics, metals and ceramics. VESPEL parts can successfully perform in demanding physical environments.

Some of VESPEL's outstanding characteristics are:

- **Low wear and friction at high pressures and velocities**
- **Outstanding creep resistance**
- **Lubricated or unlubricated performance**
- **Strength and impact resistance**
- **Continuous operation at 500°F with excursions to 900°F**

VESPEL GRADES are:

SP-1, SP-21, SP22, SP211, SP-3

For Physical Property Data - **Please call your local PORT PLASTICS branch.**

SP-1	Unfilled base resin	Provides maximum physical properties and best electrical and thermal insulation.
SP-21	15%, by weight graphite(1) filler	Graphite added to provide low wear and friction for bearings, thrust washers, and dynamic seals.
SP-22	40%, by weight graphite(1) filler	Same as SP-21 for wear and friction plus improved dimensional stability. It has the lowest coefficient of thermal expansion.
SP-211	15%, by weight graphite(1) filler and 10% by weight Teflon® fluorocarbon resin(2) fillers	Has the lowest coefficient of friction over wide range of operating conditions. Also, has lowest wear rate up to 300°F.
SP-3	15%, by weight molybdenum disulfide	MoS ₂ added to provide lubrication for seals and bearings in vacuum or dry environments

•Nominal (1) Encapsulated (2) Dry Blended