

## Vespel Material Selector Guide

Grade	Typical Application	Material Composition	Key attributes
SP1	Mechanical, electrical parts for high temperature, seats, seals, insulators	Unfilled resin	High strength, elongation, lowest modulus and thermal conductivity, optimum electrical properties
SP21	Lubricated or non lubricated, low friction and wear applications; seats, seals, bearings.	15% Graphite filled	Improved wear resistance, enhanced long term thermal stability
SP22	Lowest thermal expansion requirement, bearings.	40% Graphite filled	Maximum creep resistance, lowest coefficient of thermal expansion
SP211	Low friction and wear in moderate temperature environments, bearings.	15% Graphite & 15% PTFE filled	Lowest static friction.
SP3	Friction and wear applications in vacuum or inert gases, bearings, piston rings, seals	15% MOS2 filled	Improved wear performance in dry environments
SP221	Low wear in "non lube" conditions, suitable for use with soft metals, bearings	40% Graphite & 15% PTFE filled	Lowest wear rate, against soft metals, bronze, aluminum, in dry service
SP262	Bushings for low thermal expansion and low coefficient of friction requirements	57% Graphite & 5% Carbon fibre filled	High thermal conductivity, low coefficient of thermal expansion.

Issued March 2015 AFT Fluorotec Technical Department

All information is based on typical test results performed under specific conditions and limited sample size. This does not represent a legally binding guarantee of certain properties or the suitability for specific applications. All information is provided in good faith at time of print.

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