



MARKEZ® Z1419 PERFLUOROELASTOMER TECHNICAL DATASHEET

HIGH TEMPERATURE PERFLUOROELASTOMER

Markez Z1419 is a non-carbon black material that offers high temperature capabilities as well as excellent chemical resistance and high plasma resistance with low production of particulates and outgassing in a wide range of chemical, Oil & Gas and semiconductor applications.

FEATURES AND BENEFITS

- Superior temperature capabilities
- Excellent chemical resistance
- Excellent plasma resistance
- Minimum particulation
- Low outgassing
- Excellent physical properties

APPLICATIONS

- High temperature valves
- Down-hole applications
- Deposition: LPCVD, CVD, APCVD,
- HDPCVD, PECVD, RPCVD, SACVD
- Plasma etch: oxide and metal
- Ashing, RTP, Oxidation, diffusion & lamp anneal

TYPICAL PHYSICAL PROPERTIES

PROPERTIES	ASTM	VALUE
Color		Brown
Material Type	FFKM	Perfluoroelastomer
Hardness: (°IRHD)	D1415	
Hardness, Shore A	D2240	75
Tensile Strength MPa (psi)	D412	11.7 (1,697)
Modulus at 100@ Elongation, MPa (psi)		5.99 (868)
Elongation at Break (%)	D412	199
Compression Set 72 hrs. @ 200°C (392°F)	D395	19.7%
Minimum Operating Temperature		-15°C (5°F)
Maximum Operating Temperature		300°C (572°F)

This information is to the best of our knowledge accurate and reliable. However, Marco Rubber makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It's the customer's responsibility to evaluate parts prior to use.

Markez® is a Registered Trade name of Marco Rubber.



SEMICONDUCTOR MARKEZ® VS. KALREZ®

FFKM TECHNICAL DATASHEET

FEATURES AND BENEFITS

- High temperature resistance
- Excellent chemical resistance to a wide range of chemicals
- Exceptional acid and amine resistance
- Excellent mechanical properties
- High sealing efficiency
- Extremely low out-gassing properties

APPLICATIONS

- Semiconductor Applications
- High temperature valves
- Deposition: LPCVD, CVD, APCVD,
- HDPCVD, PECVD, RPCVD, SACVD
- Plasma etch: oxide and metal
- Ashing, RTP, Oxidation, diffusion & lamp anneal

TYPICAL PHYSICAL PROPERTIES

Property	ASTM	Z1419	K9100	K9300
Material Type	FFKM			
Color	----	Brown	Translucent Brown	Brown
Durometer, Shore A	D1415	75	70	80
Tensile Strength (psi)	D412	1,697	2,001	2,238
Elongation at break (%)	D412	199	233	222
Modulus @ 100% (psi)	D412	868	690	889
Compression Set: 70 hrs @ 200° C (392° F)	D395	----	18%	25%
Compression Set: 72 hrs @ 200° C (392° F)	D395	19.7%	----	----
Minimum Operating Temperature *	----	-15°C	-15°C	-15°C
Maximum Operating Temperature *	----	300°C	300°C	316°C