

TECHNICAL DATA SHEET



GRADE CODE: VGS-CAR-25-F

Product: 25% Carbon Filled PTFE - Polytetrafluoroethylene

Sr. No.	Parameter	Standard	Value
1	Colour	Visual	Black
2	Density	ASTM-D-792	2 ~ 2.15 gm/cc
3	Tensile Strength	ASTM-D-638	2450 PSI (Min) / 175 kg/cm2 (Min)
4	Elongation	ASTM-D-638	150 % (Min)
5	Compressive Strength	ASTM-D-695	2660 PSI (Min) / 190 kg/cm2 (Min)
6	Compressive Modulus	ASTM-D-695	60000 PSI (Min) / 4285 kg/cm2 (Min)
7	Flexural Strength	ASTM-D-790	14000 PSI (Min) / 1000 kg/cm2 (Min)
8	Flexural Modulus	ASTM-D-790	140000 PSI (Min) / 10000 kg/cm2 (Min)
9	Hardness	ASTM-D-2240	58 ~ 64 Shore D (Min)
10	Service Temperature	ASTM-D-648	250°C
11	Water Absorption	ASTM-D-570	0%
12	Dielectric Strength	ASTM-D-149	Conductive 10 ⁶ ~ 10 ⁸ ohm-cm
13	FDA Compliance	21 CFR.177.1550 (e1)(e3)	Yes

Service Conditions (Properties):

- High compressive strength.
- Improved wear resistance under load & permanent deformation.
- Better thermal / electrical conductivity.

Applications:

Piston/Rider Rings of Air Compressor

Note: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. All values at 23C unless otherwise noted.