

**FILL FLUID SPECIFICATIONS – DC704 SILICONE**

Temperature Limits:	
At Atm Pressure:	0 to 315°C (32 to 600°F)
Max Temp at Min Pressure:	See vapor-pressure curve
Viscosity at 25°C(77°F):	39 cs
Specific Gravity @ 25°C(77°F):	1.07
Coefficient of Thermal Expansion:	0.00095 cc/cc/C (0.00053 cc/cc/F)
Chemical Name:	Tetramethyltetraphenyltrisiloxane
CAS Number:	3982-82-9

Description/ Applications: DC704 is a silicone diffusion pump fluid for vacuum and high temperature industrial applications. This specialty silicone fluid has a much higher molecular weight than DC200, which increases its operating temperature and lowers its vapor pressure. Its main limitation is its higher viscosity, and so heat tracing of capillaries is suggested for many outdoor applications. The 0.03 in (0.7 mm) ID capillary is not allowed for DC704 because of its higher viscosity. Dow Corning states it neither represents or tests this fluid for medical or pharmaceutical applications.

**DC 704 VAPOR PRESSURE RESULTS (ASTM E1782)**

