At high pressures, Clearco Silicone Fluids are much more compressible than comparable organic fluids. Among silicone fluids, the low viscosity grades exhibit the greatest compressibility. At 20,000psi for example, PSF-0.65cSt silicone fluid may be compressed to 12.1% whereas the same pressure produces a compression of 9.1% in a 100cSt silicone fluid.

“Bulk Modulus” can be defined as follows: From The International Dictionary of Physics and Electronics, p. 114. “Bulk modulus (or Modulus of Volume Elasticity).......the application of pressure to a material’s medium changes its volume. The bulk modulus for an elastic medium is defined as

\[ B = \frac{\Delta P}{\Delta V/V_0} \]

where:
\[ \Delta P \] is the increase in pressure
\[ \Delta V \] is the decrease in volume and
\[ V_0 \] is the original volume

The modulus may be defined and measured under adiabatic, isothermal or other specified conditions.

It should be noted that the coefficient of compressibility of a substance is the reciprocal of its bulk modulus.