Braycote Vacuum Greases

Gas solubility data for the base fluid





Technical Report

PFPE Fluids Gas Solubility

PFPE's (perfluoropolyethers) are a line of high performance fluids with an excellent chemical inertness. The solubility of various bases in PFPE's is given in the following table.

GAS	BUNSEN COEFFICIENT AT 20°C ⁽¹⁾ PFPE
Helium	0.061
Hydrogen	0.100
Nitrogen	0.232
Oxygen	0.359
Air	0.260
Carbon Dioxide	1.500
Cl ₂	-
F ₂	-
NF ₃	-
CF ₄	-
C ₂ F ₆	-
SiH ₄	-
SiF ₄	-
SF ₆	4.290
C ₂ H ₂ CIF ₃	12.555
CHCl₂F	12.696
CHCIF ₂	4.325

(1) Bunsen coefficient is defined as the volume of gas, reduced to 0°C and 706 Torr. which is absorbed by the unit volume of solvent (at the temperature of measurement) under a gas pressure of 760 Torr.