

SF₆ basic physical properties

Chemical Formula	SF ₆	
Molecular Weight	146.05	
Sublimation Point	-63.9°C (1atm)	
Melting Point	-50.8°C (224kPa)	
Boiling Point	-63.9°C (1atm, sublimation)	
Critical Constant	Temperature	45.60°C
	Pressure	3764kPa
	Density	729kg/m ³
Specific Gravity	(atmosphere=1)	5.11 (20°C, 1atm)
Density	(gas)	6.04kg/m ³ (25°C, 1atm)
	(liquid)	1,339kg/m ³ (25°C)
Vapor Pressure	1,264kPa (0°C)	
	2,109kPa (20°C)	
	3,327kPa (40°C)	
Surface Tension	8.02N/m (-20°C)	
Viscosity	(gas)	1.5 x 10 ⁻⁵ Pa · s (25°C, 1atm)
	(liquid)	27.7 x 10 ⁻⁵ Pa · s (25°C)
Refractive Index	1.000783 (0°C, 1atm)	
Solubility in Insulating Oils	0.408mLSF ₆ /mL oil	
Solubility in Water	0.0063mLSF ₆ /mL water	
Water solubility in SF ₆	0.01%	
Dielectric Strength	2.3-2.5 (N ₂ =1)	
Dielectric Constant	1.002 (25°C, 1atm)	
Dielectric tangent=tanδ	<2 x 10 ⁻⁷ (25°C, 101kPa)	
Ozone Depletion Potential (CFC-11=1)	0	
Global Warming Potential* (CO ₂ =1)	22,200 (integration period = 100 years)	
Atmospheric lifetime	3,200 years	