

Hf(NMe₂)₄

Hafnium tetrakis(dimethylamide)

Tetrakis(dimethylamino)hafnium

Chemical formula	Hf[N(CH ₃) ₂] ₄	Formula weight	354.8
CAS No.	19782-68-4	Melting point	28°C
Physical form	White (colorless) solid		
Density	1.48g/cm ³ (ca.50°C)		
Viscosity(40°C)	2~3cP (estimate from viewing)		
Degree of association	1 (in benzene solution)		
Solubility	miscible with toluene , hexane and octane		
air and moisture sensitive			
Typical impurities (ppm)	Na<1 K<1 Mg<1 Ca<1 Cr<1 Fe<1 Cu<1 Ni<1 Zr<500		
Vapor pressure (as monomer)			

measured by gas saturation method

(temperature : 30~60°C)

34°C/0.1Torr

Clausius-Clapeyron equation

$$\log_{10} P = - \frac{3377}{T} + 9.99$$

P : Torr T : K

Heat of vaporization : 15.5 kcal/mol

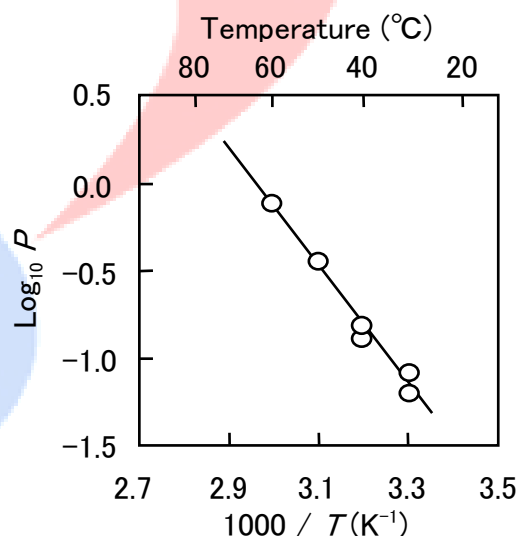


Fig. Clausius-Clapeyron plots for Hf[N(CH₃)₂]₄

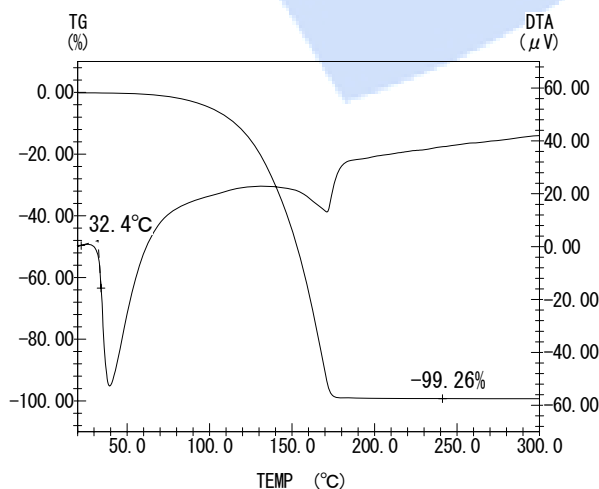


Fig. TG-DTA of Hf(NMe₂)₄ (1atm , in Ar)