



KJC-MOCVD-42

Last modified : 2004.1.22

SiH(NMe₂)₃

Trisdimethylaminosilane

Chemical formula SiH[N(CH₃)₂]₃

CAS No. [15112-89-7]

Formula weight 161.32

Physical form Colorless liquid

Melting point -90°C

Density (at 20°C) 0.850g/cm³

Boiling point 145-148°C

Degree of association

Solubility miscible

Flammable, Hygroscopic, react with water

Typical impurities (ppm) Na <1 K <1 Mg <1 Ca <1 Cr <1 Fe <1 Cu <1 Ni <1

Vapor pressure

B.J.Aylett and L.K.Peterson, J.Chem.Soc (1964), 3429

(temperature: 36~114°C)

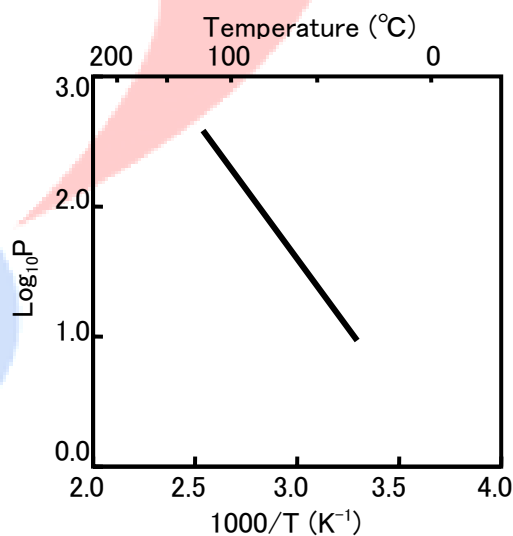
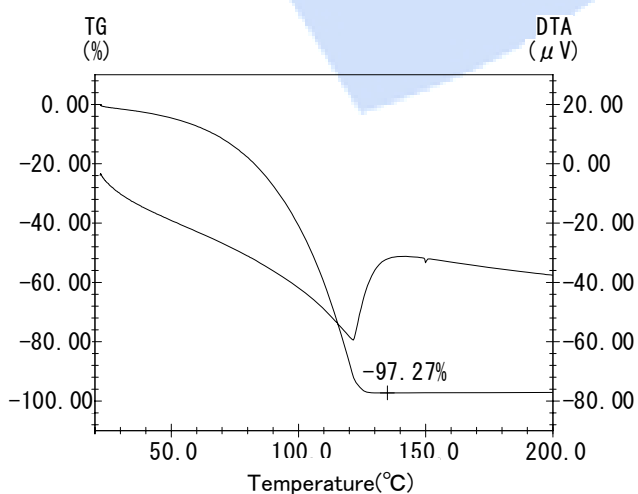
31°C/10Torr

Clausius-Clapeyron equation

$$\log_{10} P = -\frac{2147}{T} + 8.052$$

P : Torr T : K

Heat of vaporization 9.83 kcal/mol

Fig. Clausius-Clapeyron plots for SiH(NMe₂)₃Fig. TG-DTA of SiH(NMe₂)₃ (1atm, in Ar)