

Pb(dpm)₂

Lead bis(dipivaloylmethanate)

Lead bis(2,2,6,6-tetramethyl-3,5-heptanedionate)

Chemical formula $\text{Pb}[(\text{CH}_3)_3\text{C}-\text{COCHCO}-\text{C}(\text{CH}_3)_3]_2$
 CAS No. [150178-00-0] Formula weight 573.74
 Physical form White crystalline solid Melting point 130°C
 Density 1.52g/cm³
 Degree of association 1
 Solubility (at 25°C) 1140g/1□THF , 790g/1□Toluene , 420g/1□n-butyl acetate
 150g/1□hexane , 540g/1□cyclohexane,
 Typical impurities (ppm) Na <1 K <1 Mg <1 Ca 2 Cr <1 Fe <1 Cu <1 Ni <1
 Vapor pressure (as monomer)
 measured by gas saturation method
 (temperature: 100~170°C)

136°C/0.1Torr

Clausius-Clapeyron equation (P : Torr, T : K)

sublimation

$$\log_{10} P = - \frac{7800}{T} + 18.42$$

evaporation

$$\log_{10} P = - \frac{4480}{T} + 9.94$$

Heat of sublimation 30.0 kcal/mol

evaporation 20.5 kcal/mol

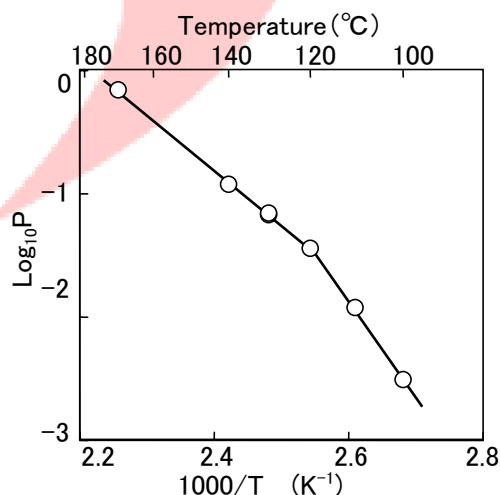


Fig. Clausius-Clapeyron plots for Pb(dpm)₂

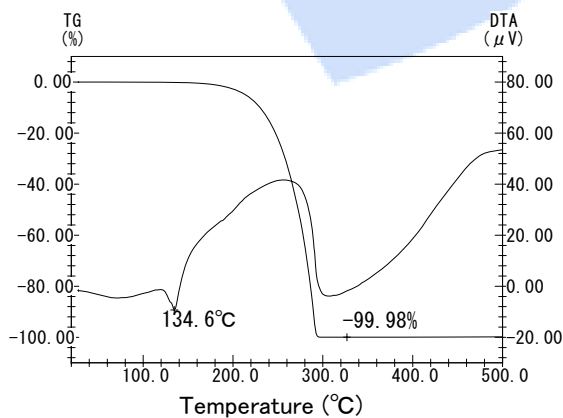


Fig. TG-DTA of Pb(dpm)₂ (1atm , in Ar)