



Zr(OiPr)(dpm)₃

Zirconium(i-propoxy)tris(dipivaloylmethanate)

Zirconium(2-propoxy)tris(2,2,6,6-tetramethyl-3,5-heptanedionate)

Chemical formula Zr[OCH(CH₃)₂][[(CH₃)₃C-COCHCO-C(CH₃)₃]₃

CAS No. [343311-16-0] Formula weight 700.13

Physical form White solid Melting point >210°C

Density (at22°C) 1.17g/cm³

Degree of association 1.07 (in benzene solution)

Solubility (at25°C) 980g/ l THF , 1100g/ l toluene

620g/ l hexane , 460g/ l n-butyl acetate

Typical impurities (ppm) Na <1 K <1 Mg <1 Ca <1 Cr <1 Fe <1 Cu <1 Ni <1 Hf <20

Vapor pressure

measured by gas saturation method

(temperature : 120~160°C)

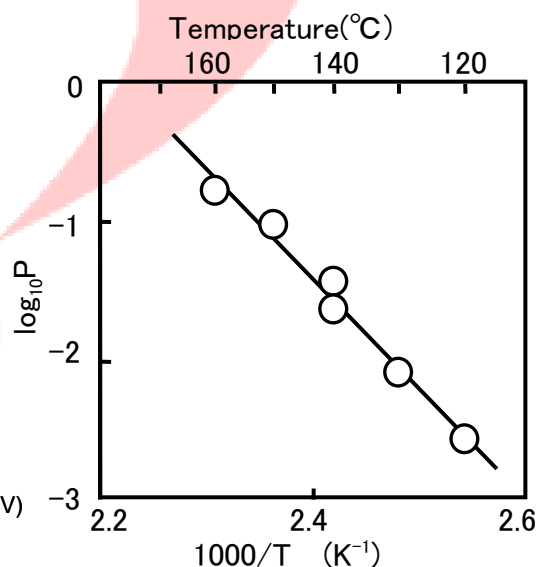
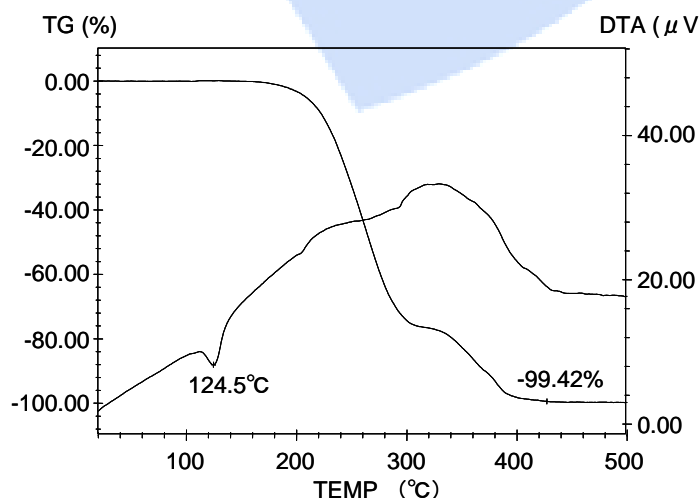
153°C/0.1Torr

Clausius-Clapeyron equation

$$\log_{10} P = - \frac{7924}{T} + 17.61$$

P : Torr T : K

Heat of vaporization 36.3 kcal/mol

Fig. Clausius-Clapeyron plots for Zr(OiPr)(dpm)₃Fig. TG-DTA of Zr(OiPr)(dpm)₃ (1atm , in Ar)