



Zr(OiPr)(dpm)₃

Zirconium(i-propoxy)tris(dipivaloylmethanate)

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

Chemical formula $\text{Zr}[\text{OCH}(\text{CH}_3)_2][(\text{CH}_3)_3\text{C}-\text{COCHCO}-\text{C}(\text{CH}_3)_3]_3$

CAS No. [343311-16-0]

Formula weight 700.13

Physical form White solid

Melting point >210°C

Density (at 22°C) 1.17 g/cm³

Degree of association 1.07 (in benzene solution)

Solubility (at 25°C) 980 g/□THF, 1100 g/□toluene

620 g/□hexane, 460 g/□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/0.1 Torr

Clausius-Clapeyron equation

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

P : Torr T : K

Heat of vaporization 36.3 kcal/mol

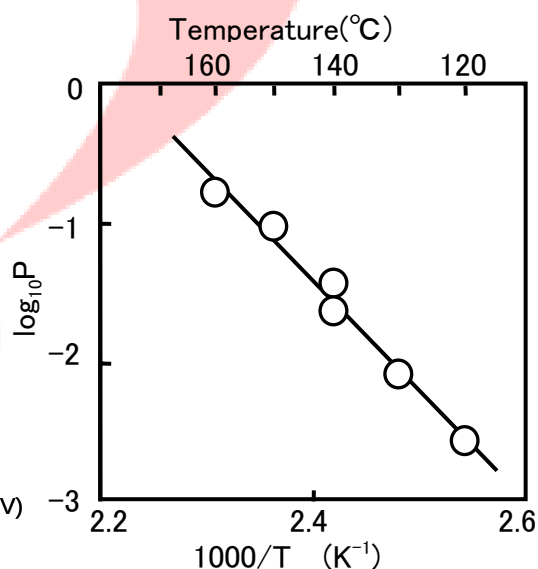


Fig. Clausius-Clapeyron plots for
Zr(OiPr)(dpm)₃

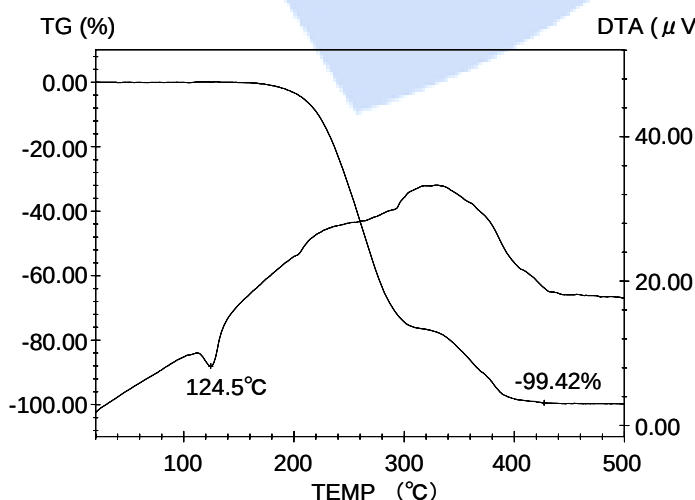


Fig. TG-DTA of Zr(OiPr)(dpm)₃ (1atm, in Ar)