
Magnetic properties of cobalt(II) nitrate complex with macrocyclic ligand derived from 2,3-butanedione and its hydrazide

Substance

Cobalt(II) nitrate complex with macrocyclic ligand derived from 2,3-butanedione and its hydrazide; $[\text{Co}(\text{L})(\text{NO}_3)_2]$

Gross Formula

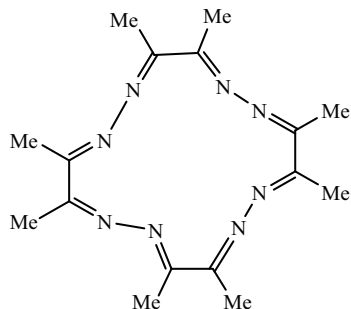
$\text{C}_{16}\text{H}_{24}\text{CoN}_{10}\text{O}_6$

Properties

Molar magnetic moment

Structure

[Co(L)(NO₃)₂]; L = 16-membered macrocyclic ligand derived from 2,3-butanedione and its hydrazone



Data

<i>T</i> [K]	χ_g [10 ⁻⁶ emu/g]	χ_M [10 ⁻⁶ emu/mol]	p_m or μ_{eff} [μ_B]	Θ_P [K]	Method	Remarks
298	—	—	4.63	—	Gouy	Distorted octahedral geometry

T: Temperature

χ_g : Specific susceptibility

χ_M : Molar susceptibility

p_m, μ_{eff} : Effective magnetic moment per molecule

Θ_P : Paramagnetic Curie constant (Weiss constant)

Reference

D.P. Singh, S. Singh, V.B. Rana, J. Indian Chem. Soc. **79**, 889 (2002)