# Structure and magnetic properties of a trinuclear nickel(II) complex with benzenetricarboxylate bridge.

Autorzy

Jerzy Mroziński

Alina Bieńko

Pavel Kopel

Vratislav Langer

Rok wydania

2008

Czasopismo

Inorganica Chimica Acta

Numer woluminu

361

Strony

3723-3729

DOI

10.1016/j.ica.2008.04.005

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

Novel trinuclear Ni(II) complex $[Ni_3(pmdien)_3(btc)(H_2O)_3](ClO_4)_3 \cdot 4H_2O$, **1** where pmdien = *N*,*N*′,*N*′,*N*″-pentamethyldiethylenetriamine, $H_3btc$ = 1,3,5-benzenetricarboxylic (trimesic) acid, has been prepared and structurally characterized. Three nickel atoms are bridged by btc trianion and their coordination sphere is completed by three N atoms of pmdien and O atom of the water molecule. The three nickel(II) magnetic centers are equivalent and their coordination spheres are completed to deformed octahedrons. Magnetic susceptibility was measured over the temperature range 1.8–300 K and $zJ' = -0.19$ cm$^{-1}$, $D = 3.79$ cm$^{-1}$, $g = 2.18$ parameters were calculated.

Słowa kluczowe

Nickel complex, Benzenetricarboxylate, Trinuclear complexes, Trimesic acid, Crystal structure, Magnetism

Adres publiczny

https://doi.org/10.1016/j.ica.2008.04.005

Strona internetowa wydawcy

http://www.elsevier.com