

Interaction of 1-germatranol hydrate with *D*-tartaric acid in water medium

© Victor Petrovich Baryshok,^{1+*} and Nhat Thuy Giang Le²

¹ Cathedra of Chemical Technology. Irkutsk State Technical University. Lermontova St., 83. Irkutsk, 664074. Russia. Phone: +7 (3952) 40-55-13. E-mail: baryvik@yandex.ru

² Baria-Vung Tau University, Vung-Tau, Vietnam. 80 Truong Cong Dinh, Phuờng 3, TP. Vũng Tàu

*Supervising author; [†]Corresponding author

Keywords: 1-Germatranol hydrate, *D*-tartaric acid, triethanolamine, bis(μ -tartrato)di(hydroxo)germanate(IV) triethanolammonium, bis(μ -tartrato)di(hydroxo)germanate(IV) pyridinium.

Abstract

When interacting hydrate 1-germatranol, $N(CH_2CH_2O)_3GeOH \cdot H_2O$, with *D*-tartaric acid in an aqueous medium germanatrane cycle collapses and forms a bis(μ -tartrato)di(hydroxo)germanate(IV) triethanolammonium. The reaction of bis(μ -tartrato)di(hydroxo)digermanium acid with triethanolamine leads to the same binuclear complex of pentacoordinated Ge atom. Pyridine ligands in bis(μ -tartrato)di(hydroxo)germanate(IV) can be easily substituted triethanolamine, also forming bis(μ -tartrato)di(hydroxo)germanate(IV) triethanolammonium.