

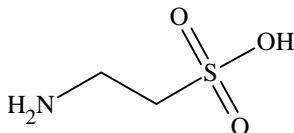


Test Report

Sample name: L-Taurine
Client: Hansen Sp. z o.o., ul. Zaborowska 8, 05-083 Zaborów, Poland
Purpose of test: Verification of delivered product
Sample description: L-Taurine
Brand name: Hansen Supplements

Description of substance:

Sample size: 10g
Property: White powder
Formula: C₂H₇NO₃S
CAS number: 107-35-7
Structure:



Batch No.: 010067230507
Date received: 20.01.2024
Test items: Identification of substance, purity, heavy metals
Summary: The sample has been identified and found to be of high quality
Measured purity: **Above 98%** according to ¹H NMR analysis. Appropriate spectra are shown in (Fig. 1 and 2).

Authentication method: Standard and literature NMR shifts Hohmann, M., Felbinger, C., Christoph, N., Wachter, H., Wiest, J., & Holzgrabe, U. (2014). Quantification of taurine in energy drinks using ¹H NMR. *Journal of Pharmaceutical and Biomedical Analysis*, 93, 156-160, Lin, Y. Y., Wright, C. E., Zagorski, M., & Nakanishi, K. (1988). ¹³C-NMR study of taurine and chlorotaurine in human cells. *Biochimica et Biophysica Acta (BBA)-Molecular Cell Research*, 969(3), 242-248.
https://bmr.io/metabolomics/mol_summary/show_data.php?id=bmse000120 and ACDLABS database.



All values are within the relevant standards

Test results:

Purity:

Heavy metals: n.d.

Pb (Lead): n.d.

Hg (Mercury): n.d.

Cd (Cadmium): n.d.

As (Arsen): n.d.

Comments:

n.d. – not detected, below limit of detection on AAS pectr AA240FS + AA240Z + GTA120

Date: 27.01.2024

Tested by: prof. dr hab. Antoni Szumny

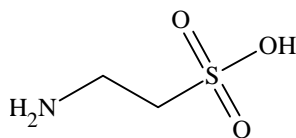


Figure 1. Chemical structure of Taurine

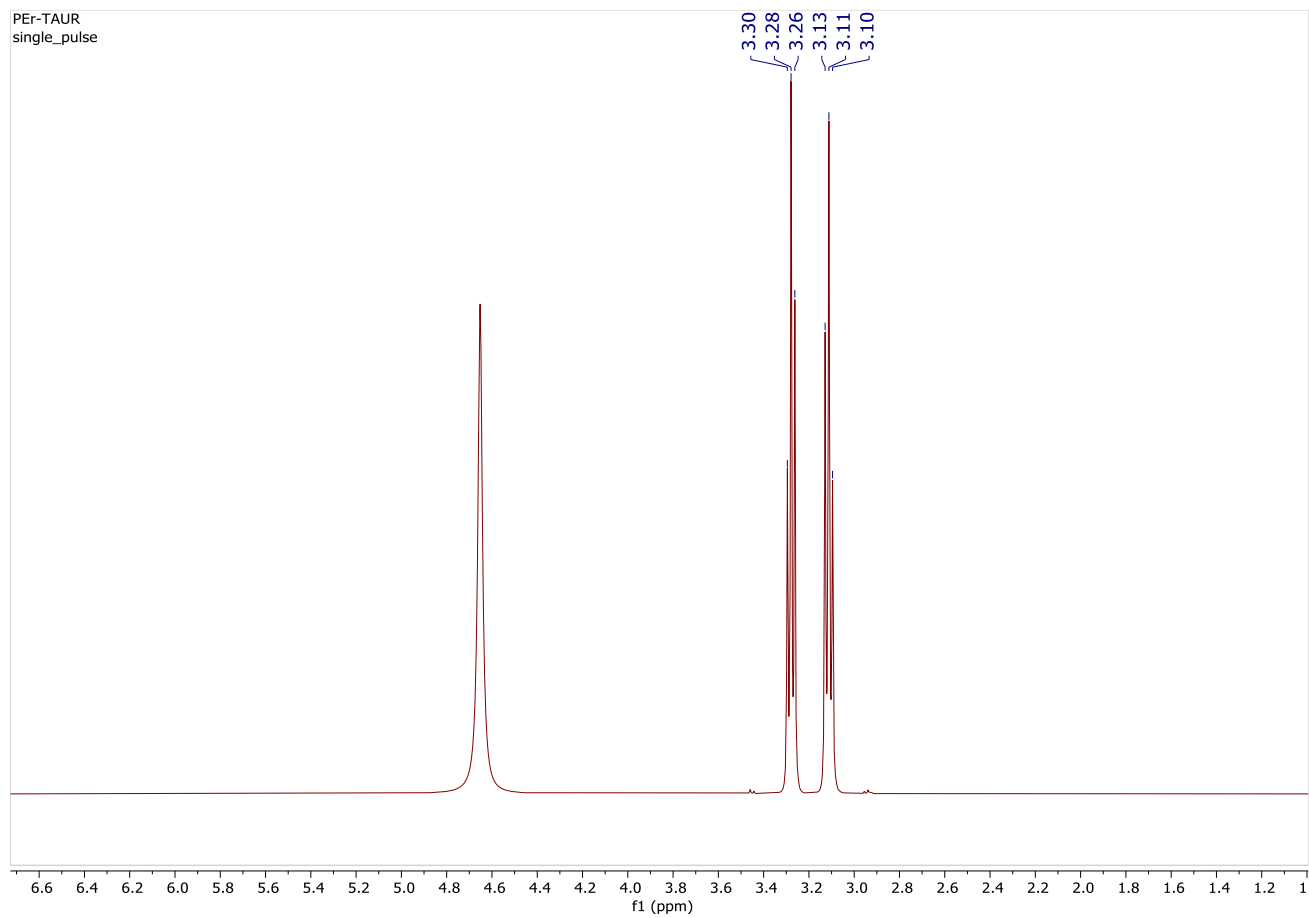


Figure 1. ^1H Taurine, batch No. 010067230507 of NMR (in D_2O) full spectrum;

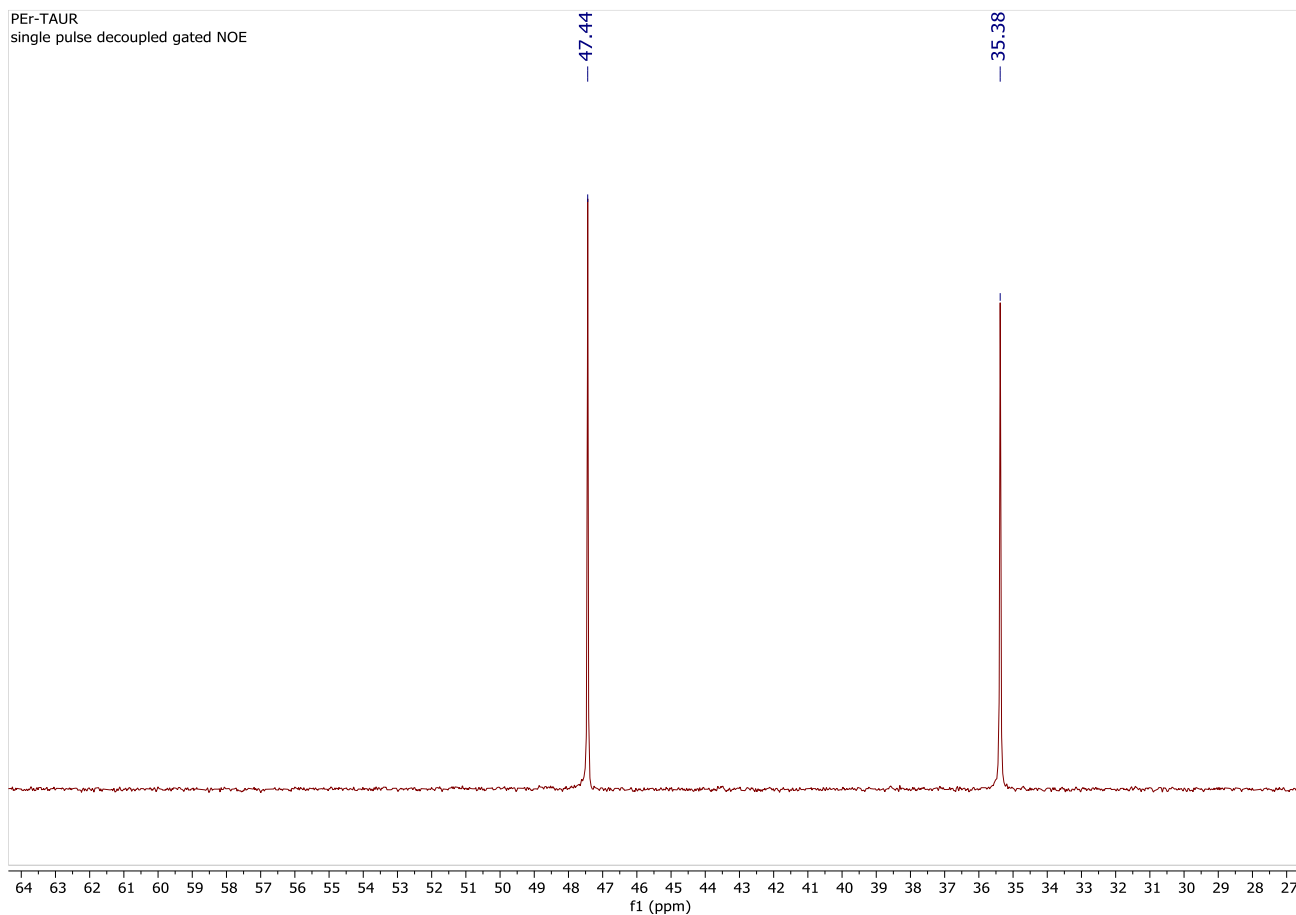


Figure 2 ¹³C spectrum of Taurine, batch No. 010067230507 of NMR (in D₂O) selected region spectrum;

27.01.2024,

prof. dr hab. Antoni Szumny