

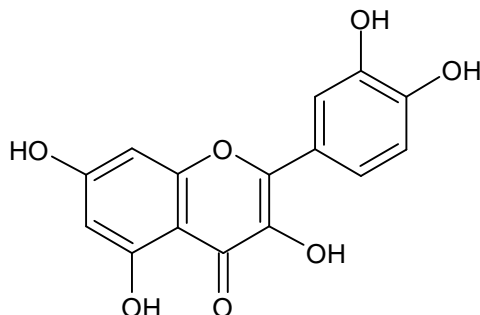


## Test Report

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

### Description of substance:

**Sample size:** 10g  
**Property:** yellow powder  
**Formula:** C<sub>15</sub>H<sub>10</sub>O<sub>7</sub>  
**CAS number:** 117-39-5  
**Structure:**



**Batch No.:** 030771210402  
**Date received:** 03.04.2023  
**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 <sup>1</sup>H NMR analysis. Appropriate spectra are shown in (Fig. 2 and 3).  
**Authentication method:** Standard and literature c13.materia-medica.net and Kyriakou, E., Primikyri, A., Charisiadis, P., Katsoura, M., Gerotheranassis, I. P., Stamatis, H., & Tzakos, A. G. Unexpected Enzyme-Catalyzed Regioselective Acylation of Flavonoid Aglycones.

### All values are within the relevant standards

### Test results:



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**Purity:** KATEDRA CHEMII

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 spectr AA240FS + AA240Z + GTA120

**Date:** 20.04.2023

**Tested by:** Antoni Szumny

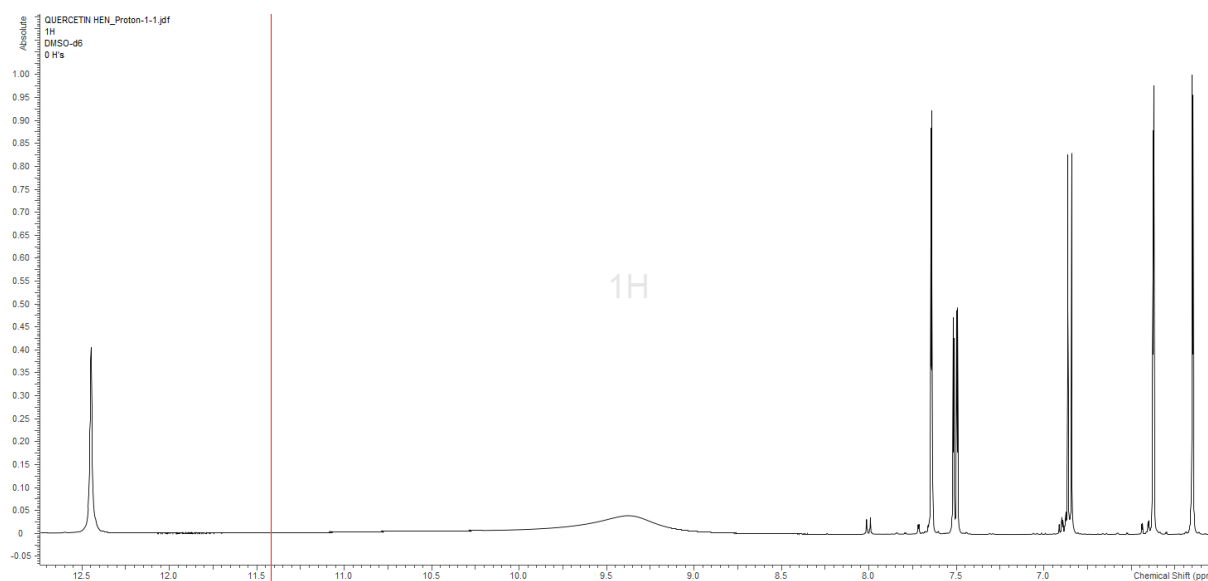


Figure 2.  $^1\text{H}$  spectrum of quercetin (in DMSO);

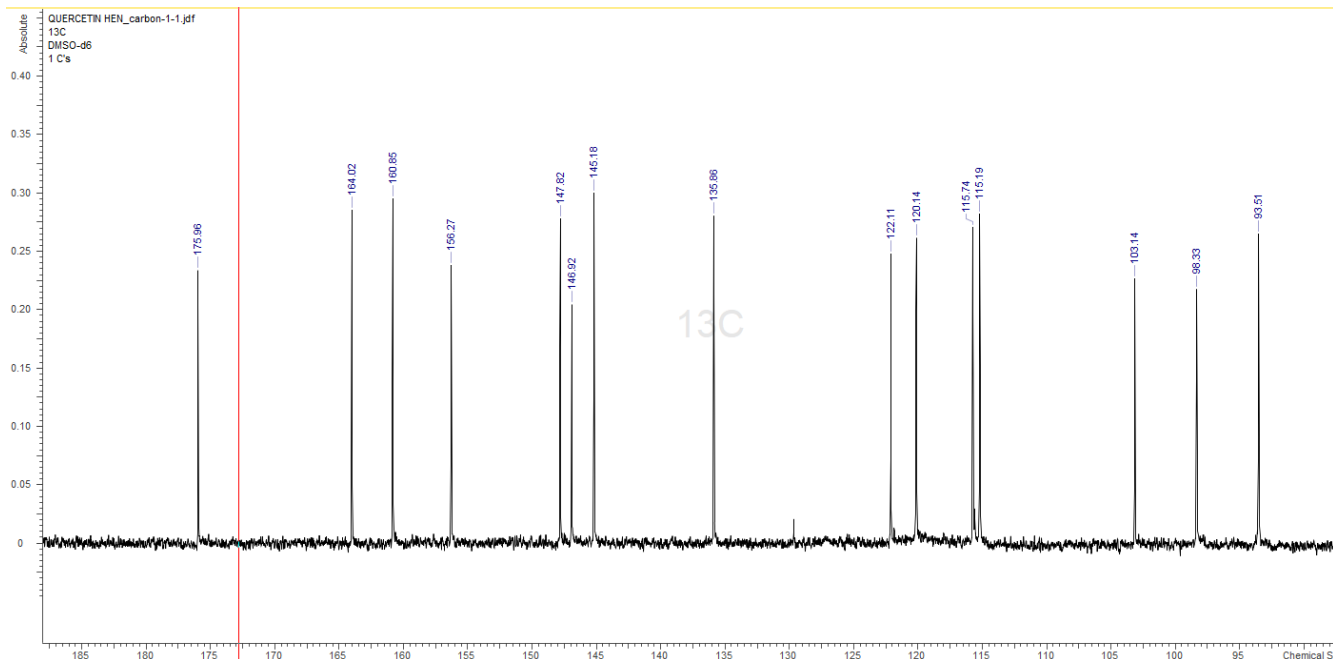


Figure 3.  $^{13}\text{C}$  spectrum of quercetin (in DMSO);

20.04.2023

Antoni Szumny

