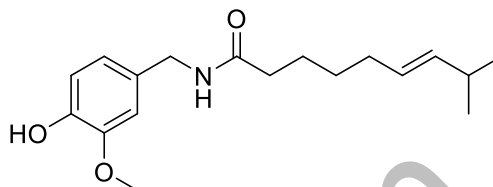


## Certificate of Analysis

## Capsaicin

Compound: Capsaicin  
 CAS number: 404-86-4  
 Catalogue number: OFS0001  
 Data of analysis: 2019-02-09  
 Long term storage: The compound should be stored below room temperature in the dark, in a tightly sealed contained  
 Shelf Life: Two years from date of manufacture, when properly stored



Chemical Formula: C<sub>18</sub>H<sub>27</sub>NO<sub>3</sub>  
 Molecular Weight: 305,42

Analysis Method	Product Specification	Product Result
Chemical purity by HPLC/UV	≥96%	98.2%
Chemical purity by <sup>1</sup> H NMR	≥96%	96.3%
Identity by <sup>1</sup> H NMR	Conforms to structure	PASS
Identity by <sup>13</sup> C NMR	Conforms to structure	PASS
Identity by Mass Spectrometry	Conforms to structure	PASS
Identity by Elemental Analysis	Minimum 96% (Carbon)	98.9%
E:Z ratio by <sup>1</sup> H NMR	Minimum 6:1	9:1

**Hazards**

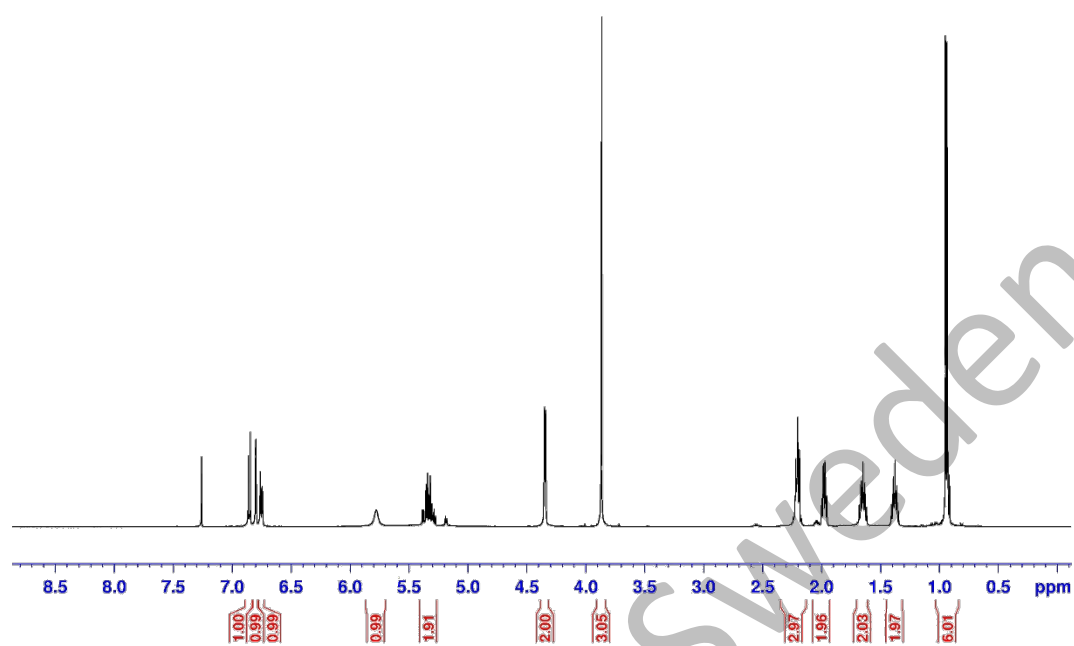
Read Material Safety Data Sheet (MSDS) and understand any potential hazard(s) prior to the use of this product

Attached data in Appendix: <sup>1</sup>H NMR, <sup>13</sup>C NMR and Mass Spectrometry

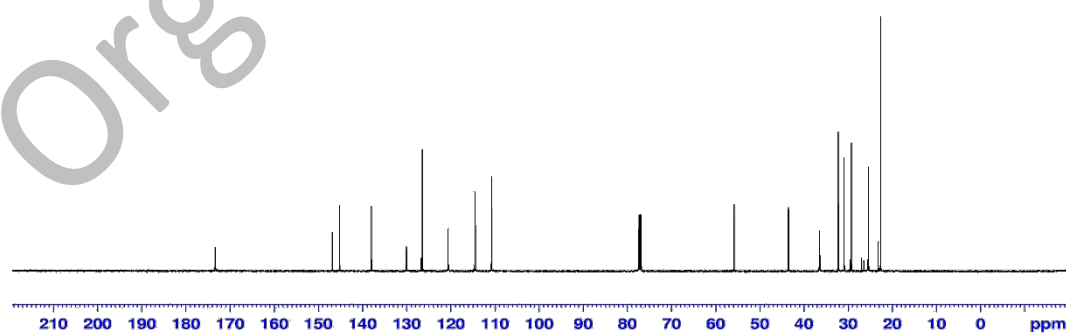
Dr. Shuangzheng Lin, Organofuel Sweden AB

Date

$^1\text{H}$  NMR



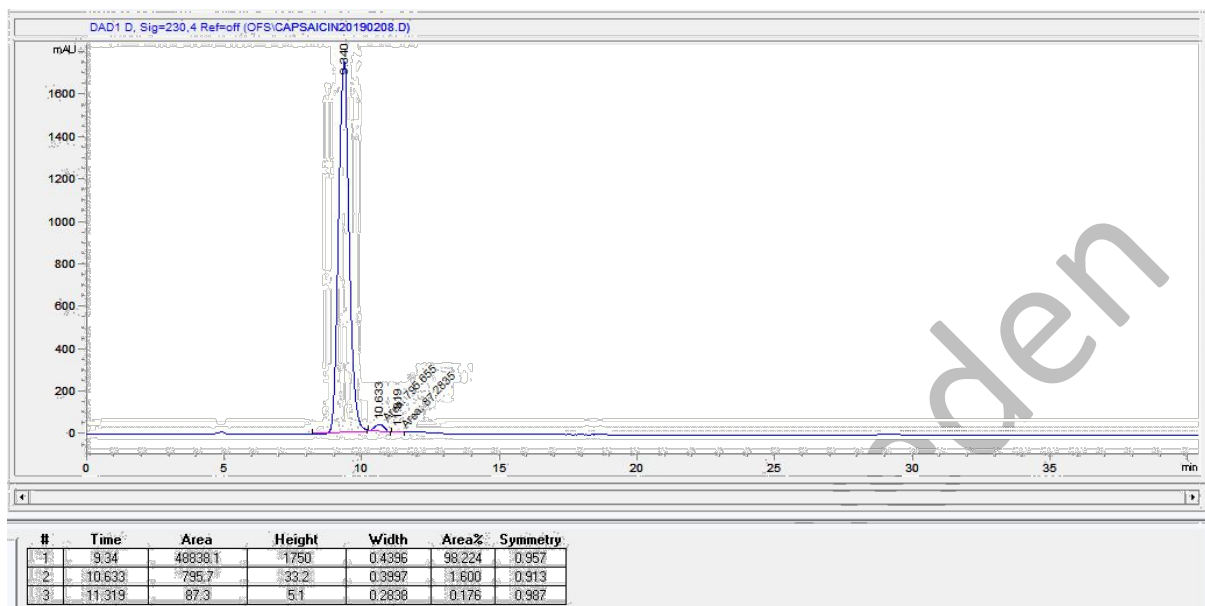
$^{13}\text{C}$  NMR



Dr. Shuangzheng Lin, Organofuel Sweden AB

Date

HPLC/UV



Dr. Shuangzheng Lin, Organofuel Sweden AB

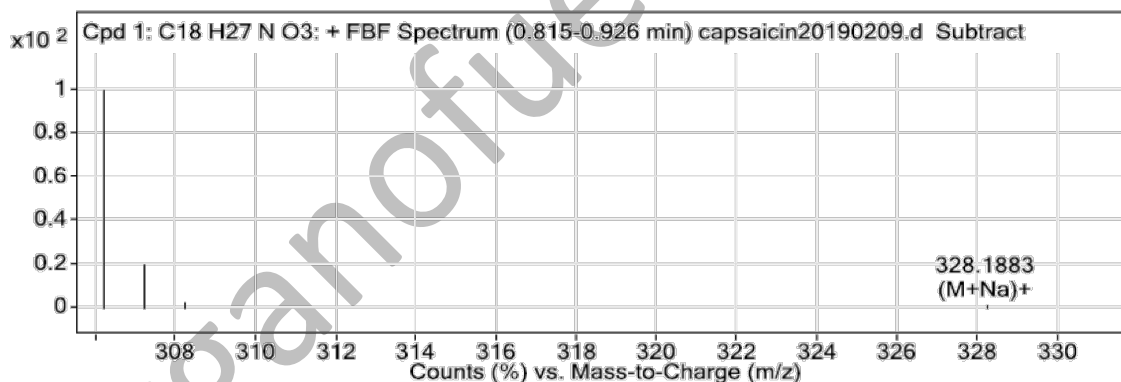
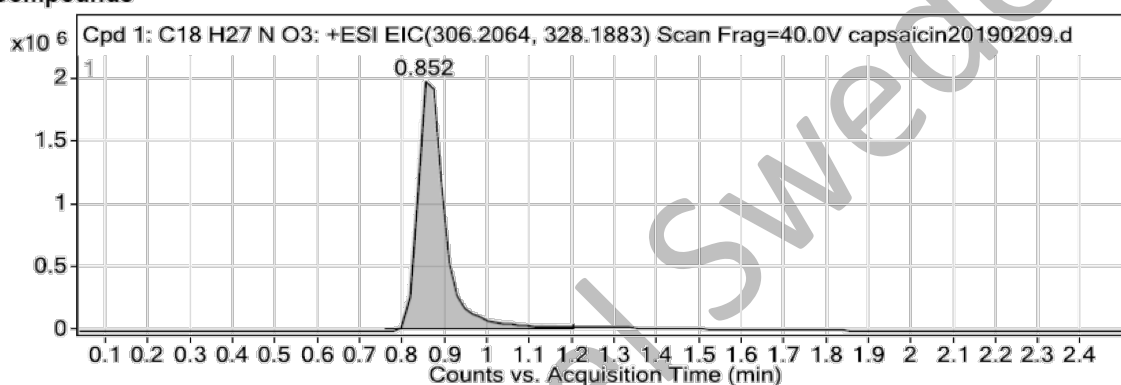
Date

Mass Spectrometry

**Qualitative Analysis Report**

Data Filename	capsaicin20190209.d	Sample Name	Unavailable
Sample Type	Unavailable	Position	Unavailable
Instrument Name	Unavailable	User Name	Unavailable
Acq Method		Acquired Time	Unavailable
IRM Calibration Status	Success	DA Method	Default.m
Comment	Sample information is unavailable		

Compounds



Peak List

m/z	z	Abund	Formula	Ion
306.2065	1	1021314.13	C18H28NO3	(M+H)+
307.2097	1	200538.09	C18H28NO3	(M+H)+
308.2125	1	24978.33	C18H28NO3	(M+H)+
309.2158	1	2690.48	C18H28NO3	(M+H)+
328.1883	1	15457.22	C18H27NNaO3	(M+Na)+
329.1916	1	3473.48	C18H27NNaO3	(M+Na)+
330.1956	1	567.74	C18H27NNaO3	(M+Na)+
331.2014	1	136.19	C18H27NNaO3	(M+Na)+