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Analysis method: quantitative ¹H-NMR spectroscopy, Aloin according to SAA-MET004-03

Instrument: Bruker Avance III HD 500 MHz with autom. sample changer & BBO Prodigy cryo probe
HPLC- equipment Surveyor (ThermoFinnigan, San José, CA)
Freeze-drying device Type 318 (Christ, Aichach-Oberbernbach, D)

Internal Standard: Nicotinic acid amid (NSA; Fluka Chemie AG, Buchs (CH), Art.-Nr. 72340; RG 9)
Aloin (Roth, Karlsruhe (D); Art.-Nr. 1481-1; RG 21)

Sample Ident.:	ALOE LIVE 010613 (05.2015) 1000 ml		Batch:	---
Description:	clear, colourless liquid		Lab. No.:	---
Spectral Service Code:	LNZ39792		Results from:	02/07/2013
	Content [%]*	Content [mg/l]*	Origin of component	
Aloverose (polysaccharide)	9.6	611.5	fresh Aloe Vera	
Glucose	23.2	1,485.3	fresh Aloe Vera	
Malic acid	16.7	1,069.2	fresh Aloe Vera	
Lactic acid	trace		degradation (bacterial)	
Citric acid	11.2	715.6	WLM or added acidifier	
WLM	not detected		whole leaf marker (WLM)	
Maltodextrin	not detected		formulation aid for drying	
Acetic acid	not detected		degradation (hydrolysis)	
Succinic acid	not detected		degradation (enzymatic)	
Fumaric acid	not detected		degradation (enzymatic)	
Sodium benzoate	detected		added preservative	
Potassium sorbate	detected		added preservative	
Other**	detected		unknown	
Dry matter	0.6		pH value:	not determined
Aloin***		< 0.1 ppm		

* The content data [%] refer to dry matter. The content data [mg/l] refer to dry weight 0.7 [%] for powders.

** Organic and inorganic compounds not to be quantified by NMR analysis.

*** Limit of quantification 0.1 ppm.

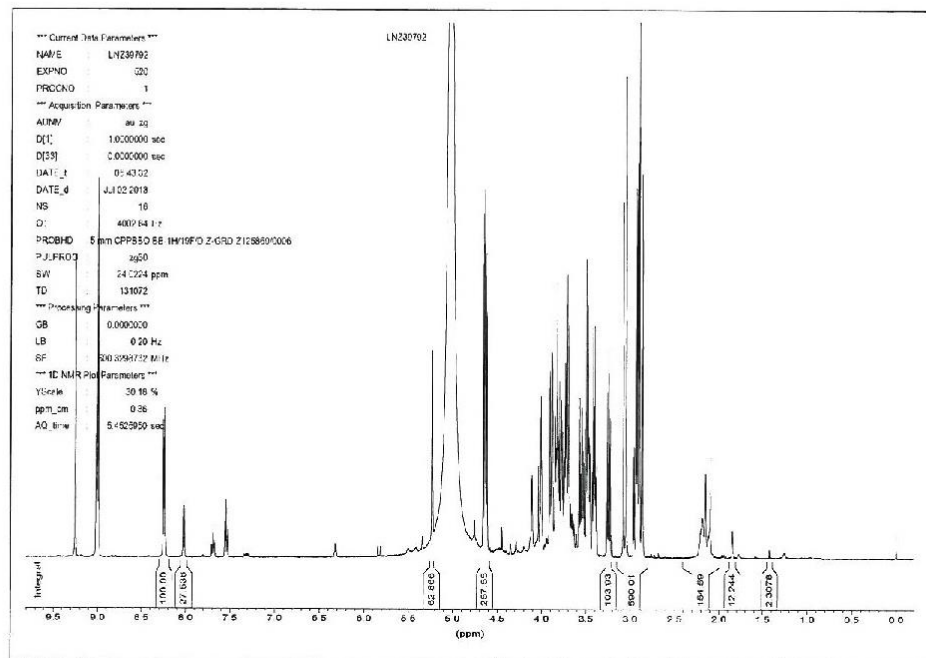


Fig. 1 ¹H-NMR spectrum of test item LNZ39792

Cologne, 24 July 2013
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Dr. Gabriele Rändel
(Nutritional scientist)

The sample is of Aloe Vera origin with preservative. It shows no degradation.

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