

Analytical information

Name: Quality Controlled standard of Gambierone

Code: 00-GAM

Batch: 20-001

General description:

Product Specification	
MOLECULAR FORMULA:	C ₅₁ H ₇₆ O ₁₉ S
MOLECULAR WEIGHT:	1025.1997
MONOISOTOPIC MW	1024.4702
CAS NUMBER:	1778681-82-5
SOURCE/HOST:	<i>Gambierdiscus belizeanus</i>
CONCENTRATION:	(19.9 ± 0.6) µg / mL
PURITY:	≥ 98%
FORMULATION:	Liquid. Methanol
SHIPPING:	On ice
LONG TERM STORAGE:	-20°C
HAZARD:	TOXIC

Instructions for proper handling use:

This material contains toxic material, and should be handled with care. Read MSDS before using. Material Safety Data sheet for information regarding 00-GAM is enclosed in the package. Use proper disposal methods.

Before opening an ampoule it must be guaranteed that the content is a liquid and properly mixed to ensure homogeneity. Sample aliquots for analysis should be withdrawn at 15 °C to 25 °C immediately after opening the ampoules and should be processed without delay for the concentration value to be valid within the stated uncertainty. Ampoule should not remain open longer than few minutes due to solvent volatility and air contamination.

Instructions for appropriate conditions of storage:

The original vial should be stored at temperatures below/at -20 °C (freezer) until use. Unopened ampoules should be stored upright under normal laboratory conditions inside the original container supplied.

Property values:

Date of analysis:	April, 13 th 2020
Concentration of Gambierone:	(19.9 ± 0.6) µg / mL

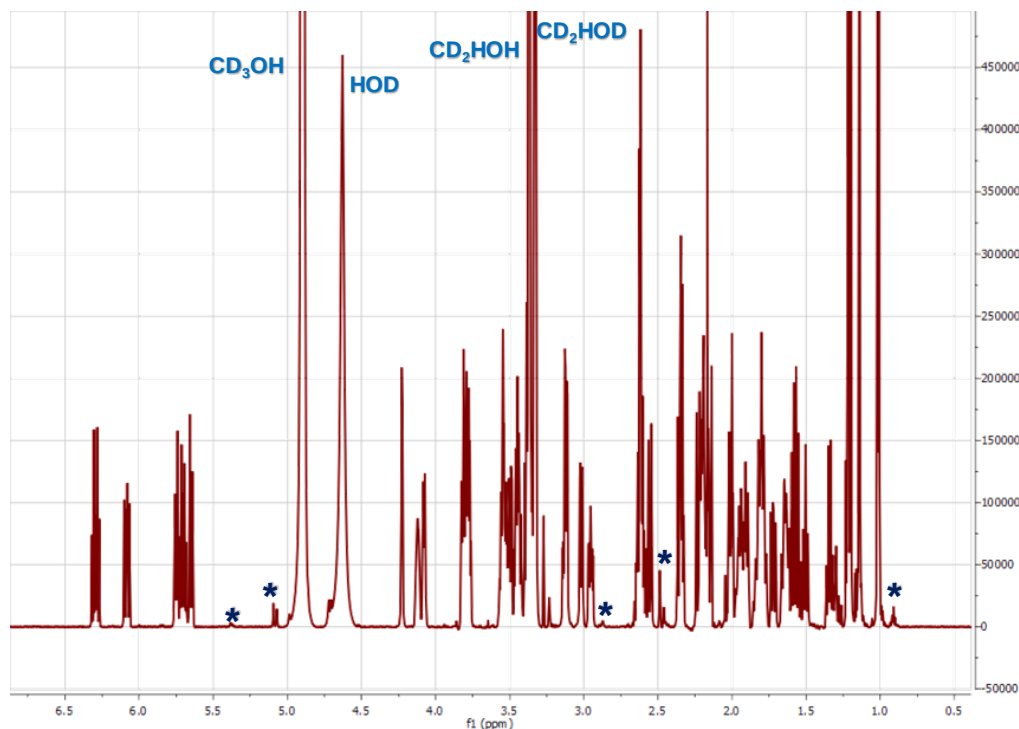


Figure 1. ^1H -NMR spectrum of Gambierone solution, BRUKER 750 AVANCE, 6 mM solution of Gambierone in CD_3OH used in preparation of 00-GAM batch 20-001. No identified impurities are highlighted. As the structure of these impurities is not known, their exact amount cannot be calculated. Because the impurities usually are smaller molecules (otherwise, more NMR signals would arise), it can be estimated from the corresponding integrals, but this purity is not relative to close-related impurities to Gambierone analogues.

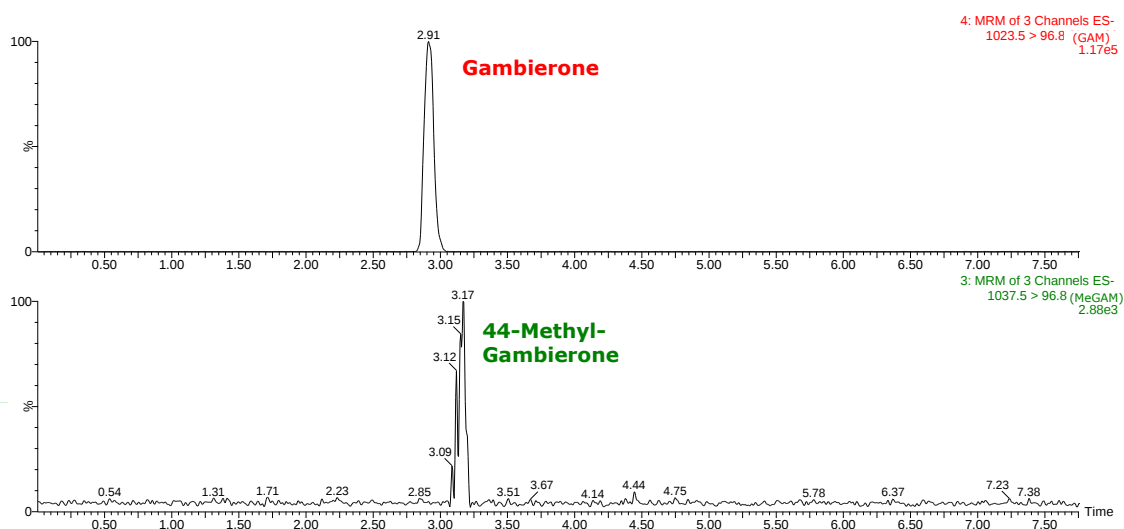


Figure 2. Analysis of the 00-GAM solution by UPLC-MS/MS. Conditions: ACQUITY UPLC BEH C18 1.7 μm , 100x2.1 mm, UPLC column. Elution conditions, gradient mode with mobile phases: (A) Water and (B) acetonitrile 95% (v/v), both with 2mM of ammonium formate and 50mM of formic acid; Gradient: 0 min 35% B; 5.0 min 100% B; 10 min 100% B; 10.1 min 35% B; 13 min 35% B; flow rate: 0.4 mL/min. Temperature: 40°C. MS detector: Waters XEVO TQMS using the suitable MRM transition performance for Gambierone. Low level of 44-methyl-Gambierone (1.6%) is present.

Inquiries concerning this material should be directed to:

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This Analytical Information is only valid if the product was obtained directly from Laboratorio CIFGA S.A. or one of our authorized distributors.

Certificate Revision History: <i>May, 26th 2020</i> (Original certificate issue date, revision 1). <i>June, 10th 2020</i> CAS Number identifier (<i>certificate rev. 2</i>).
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