

Certificate of Analysis

Product Name: THIABENDAZOLE
PESTANAL™, analytical standard
Product Number: 45684
Batch Number: BCBV5436
Brand: Sigma-Aldrich
CAS Number: 148-79-8
Formula: C₁₀H₇N₃S
Formula Weight: 201.25
Expiration Date: JUL 2022
Quality Release Date: 08 AUG 2017

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	WHITE TO OFF WHITE	WHITE
APPEARANCE (FORM)	POWDER OR CRYSTALS	POWDER
PURITY (GC AREA %)	≥ 98.0 %	98.6 %
MELTING POINT	298 - 304 C	302 C
WATER	≤ 1.0 %	0.09 %
PROTON NMR SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS



Dr. Claudia Geitner
Manager Quality Control
Buchs, Switzerland

Sigma-Aldrich warrants that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

45684 Thiabendazole

Lot Number: **BCBV5436** Sample Name: **T39427_001_GC**

Shimadzu GC-2010 Plus	
Injector :	250 °C
Detector (FID):	320 °C
Carriergas:	Helium
Velocity:	40.0 cm/s
Temp. Control:	see Figure 1
Split Ratio:	100:1
Range:	-
Injection Volume:	1.0 ul
Vial Number:	4
Run Time:	20.00 min
Column:	Equity-1, 30 m x 0.25 mm, 1.0 um
Sample Prep.:	ca 20mg sample in 2ml methanol

GC Serial Number:	C11805270206 US
Injection Time:	25.07.17 17:02
Sample Type:	unknown
Channel:	GC_2
Sequence Creation Time:	04.07.17 15:51
Sequence Created By:	Mirela Brdanovic
Time Processed:	11.08.17 09:14
Processed By:	Markus Urthaler

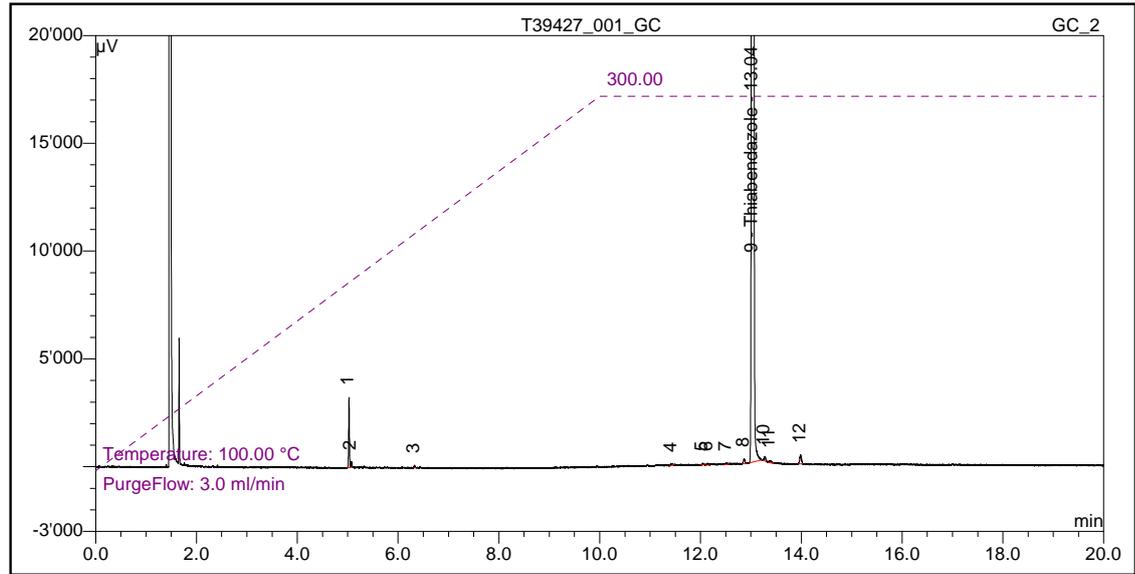


Figure 1: Zoomed Chromatogram and Temperatur Program

No.	Ret.Time min	Peak Name	Type	Height μ V	Area μ V*min	Amount	Rel.Area %
1	5.028	n.a.	BM	3257	59.4046	n.a.	0.714
2	5.074	n.a.	MB	269	5.5508	n.a.	0.067
3	6.325	n.a.	BMB	115	1.7783	n.a.	0.021
4	11.430	n.a.	BMB*	80	2.8125	n.a.	0.034
5	12.042	n.a.	BMB*	76	1.9471	n.a.	0.023
6	12.143	n.a.	BMB*	88	3.4967	n.a.	0.042
7	12.516	n.a.	BMB*	83	3.0967	n.a.	0.037
8	12.871	n.a.	BMB*	210	7.2075	n.a.	0.087
9	13.040	Thiabendazole	BMB	245305	8210.3329	n.a.	98.619
10	13.274	n.a.	BMB	204	6.9992	n.a.	0.084
11	13.377	n.a.	BMB*	108	6.3367	n.a.	0.076
12	13.988	n.a.	BMB	423	16.3450	n.a.	0.196
Total:				250218	8325.3079		100.000