

Certificate of Analysis

Product Name: Tefluthrin
PESTANAL™, analytical standard

Product Number: 35548

Batch Number: BCCG3167

CAS Number: 79538-32-2

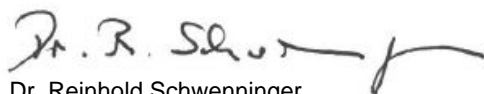
Formula: C₁₇H₁₄ClF₇O₂

Formula Weight: 418.73

Expiration Date: OCT 2026

Quality Release Date: 07 DEC 2021

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	WHITE TO FAINT YELLOW TO FAINT BEIGE	WHITE
APPEARANCE (FORM)	POWDER OR CRYSTALS	POWDER
PURITY (HPLC AREA %)	≥ 95.0 %	95.6 %
SPECIFIC ROTATION (20/D)	14.5 - 18.5 DEGREES	18.0 DEGREES
CONCENTRATION	--	5.56 MG/ML DICHLOROMETHANE
MELTING POINT	41 - 46 C	46 C
WATER	≤ 1.0 %	0.2 %
PROTON NMR SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS



Dr. Reinhold Schwenninger

Quality Assurance

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.

The vibrant M and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. Detailed information on trademarks is available via publicly accessible resources.
© 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.



Thermo Scientific Vanquish UHPLC	
Pump : VF-P20-A	Injection Time: 23.11.21 11:55
Autosampler: VF-A10-A	Processed By: murthale
Detector: VF-D11-A	Vial Number: G:B9
Column: Supelco Ascentis Express C18, 2.7 um	Column S/N: -
Column Dim.: 150 x 2.1 mm	Sample Type: Unknown
Mobile Phase:	Injection Volume: 1.0 µl
%A: ACN	Flow: 0.40 ml/min
%B: MeOH	Column Temp. (°C): 40.00
%C: H2O	Run Time: 40.00 min
%D: H3PO4 0.01M	
Gradient : see Figure 1	
Sample Prep.: 1 mg sample in 1 ml acetonitrile	

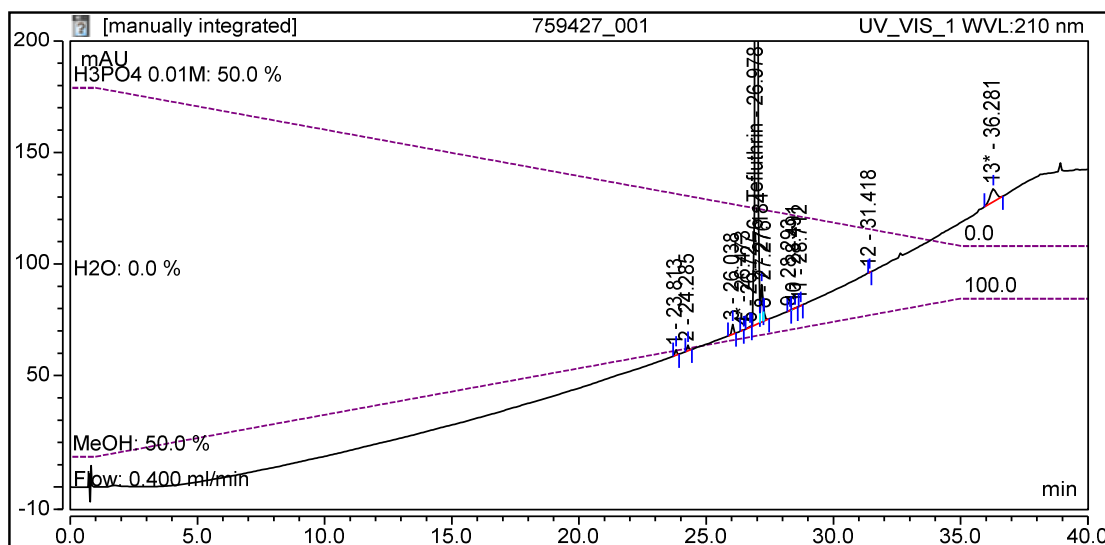


Figure 1: Zoomed Chromatogram

No.	Ret. Time min	Peak Name	Area mAU*min	Height mAU	Amount	Rel. Area %
1	23.813		0.18801	2.45272	n.a.	0.20
2	24.285		0.20661	2.50266	n.a.	0.22
3	26.038		0.34000	4.45464	n.a.	0.37
4	26.473		0.01784	0.00000	n.a.	0.02
5	26.727		0.04467	0.45276	n.a.	0.05
6	26.978	Tefluthrin	88.55482	1192.81169	n.a.	95.55
7	27.184		1.36238	16.79851	n.a.	1.47
8	27.276		0.23474	3.84973	n.a.	0.25
9	28.293		0.01519	0.17012	n.a.	0.02
10	28.491		0.02993	0.18291	n.a.	0.03
11	28.712		0.01437	0.19764	n.a.	0.02
12	31.418		0.01290	0.21620	n.a.	0.01
13	36.281		1.66207	5.84810	n.a.	1.79
Total:			92.68351	1229.93768		100.00

Table 1: Integration

The vibrant M and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. Detailed information on trademarks is available via publicly accessible resources.

© 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

