

Certificate of Analysis

Product Name: Penicillin G potassium salt
VETRANAL™, analytical standard

Product Number: 46609

Batch Number: BCCC6330

Brand: Sigma-Aldrich

CAS Number: 113-98-4

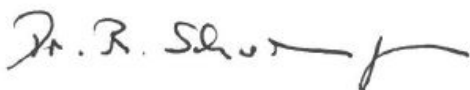
Formula: $C_{16}H_{17}KN_2O_4S$

Formula Weight: 372.48

Expiration Date: NOV 2024

Quality Release Date: 07 JAN 2020

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	WHITE TO OFF WHITE	WHITE
APPEARANCE (FORM)	POWDER OR CRYSTALS	POWDER
PURITY (HPLC AREA %)	≥ 98.0 %	99.3 %
MELTING POINT	220 - 226 C	226 C
WATER	≤ 1.0 %	0.4 %
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.

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46609 Penicillin G potassium salt

Lot Number: BCCC6330		Sample Name: 687970_001	
Dionex Ultimate 3000 RSLC			
Pump : LPG-3400RS	Injection Time : 06.01.20 14:32		
Autosampler : WPS-3000	Processed By : murthale		
Detector : VWD-3400	Vial Number : BA8		
Column : Supelco Ascentis Express C18, 2.7 um	Column S/N : -		
Column Dim. : 50 x 2.1 mm	Sample Type : Unknown		
Mobile Phase :	Injection Volume : 1.0 µl		
%A: ACN	Flow : 1.00 ml/min		
%B: %B	Column Temp. (°C) : 35.0		
%C: %C	Run Time : 6.00 min		
%D: H3PO4 0.01 M			
Gradient : see Figure 1			
Sample Prep. : 1 mg sample in 1 ml acetonitrile:water 1:1			

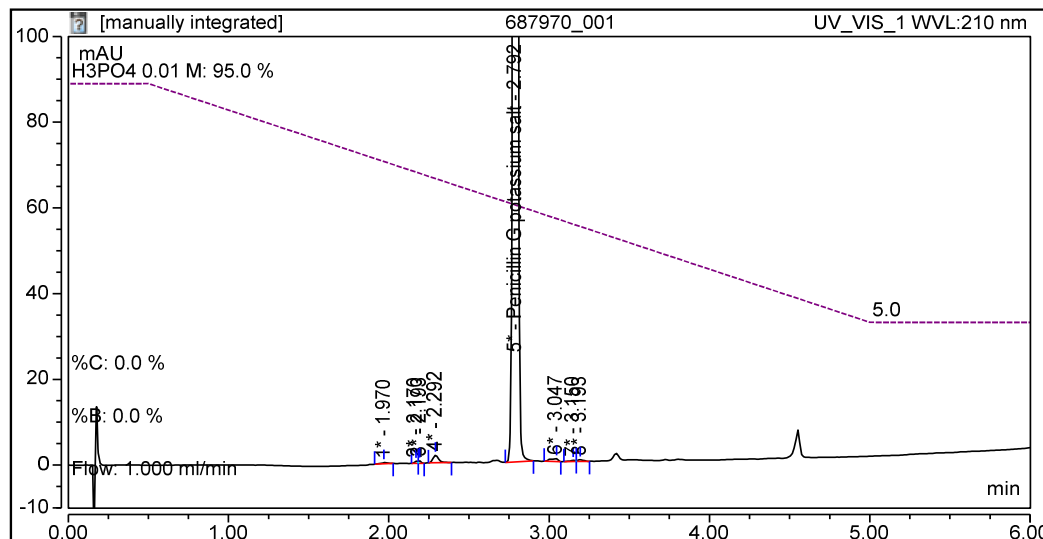


Figure 1: Zoomed Chromatogram

No.	Ret. Time min	Peak Name	Area mAU*min	Height mAU	Amount	Rel. Area %
1	1.970		0.01335	0.28271	n.a.	0.06
2	2.170		0.01135	0.51379	n.a.	0.05
3	2.193		0.01018	0.57097	n.a.	0.04
4	2.292		0.07382	1.78892	n.a.	0.31
5	2.792	Penicillin G potassium sa	23.71048	1056.55887	n.a.	99.27
6	3.047		0.03828	0.66044	n.a.	0.16
7	3.150		0.01049	0.28153	n.a.	0.04
8	3.193		0.01734	0.41132	n.a.	0.07
Total:			23.88530	1061.06854		100.00

Table 1: Integration