

676064 **Lot: 803565**
Cefazolin sodium salt1. General Information

Formula	C ₁₄ H ₁₃ N ₈ NaO ₄ S ₃	Expiry Date	01 Jul 2026
Mol. Weight	476.49 g/mol	Store at	4°C (in the dark)
CAS-No.	27164-46-1		

2. Batch Analysis

Identity	confirmed by LC-MS		
Overall Purity	95.63 % (g/g)	Expanded Uncertainty	1.02 % (g/g)
Assay Purity (HPLC)	97.03 % (g/g)	Uncertainty	0.50 % (g/g)
Water	1.44 % (g/g)		

Certified on 22 Jun 2021



by Jan Heumann

The overall purity is calculated by: $\text{Purity(\%)} = \frac{\text{Assay purity} \times (100 - \text{water content} - \text{impurities})}{100}$

The reported uncertainty U is an expanded uncertainty according to EURACHEM / CITAC guide CG4 – Quantifying Uncertainty in Analytical Measurement. The Uncertainty is based on the combined uncertainties, including uncertainties of characterization and stability testing. The expiry date is based on the current knowledge and holds only for proper storage conditions in the originally closed flask. If the substance is proven to be unstable under the given storage conditions, you will be contacted immediately. The warranty of this product is limited to the purchasing price of this product and to the first point of use.

Our standards are for laboratory use only and can be used as reference material for calibration of chromatographic systems or related analytical techniques. For handling instructions see the MSDS. A minimum sample of 2 mg is recommended. Deploying less material will increase the uncertainty. The material in the vial can be used multiple times, but it is strongly recommended, that all external negative influences to the material are considered and ruled out (e.g. high temperatures, UV-radiation, moisture, oxygen). It is strongly recommended to open the vial at room temperature only and handle the material under inert gas if necessary. The integrity of the purity cannot be guaranteed, if the substance is handled under unfavorable conditions.

The balances used are calibrated with weights traceable to the national standards (DKD).

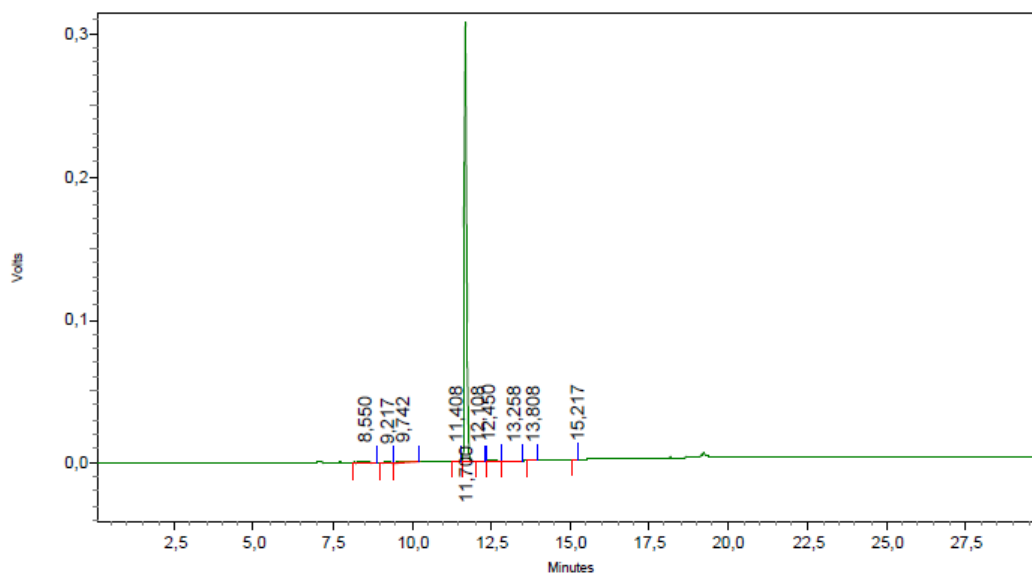
The HPC Standards GmbH, accredited by DAkkS as indicated by the accreditation number D-RM-20844-01-00, has shown competence based on ISO 17034:2017 for production of reference materials in form of organic pure substances and their solutions (for further specification see the annex of the accreditation certificate).

HPLC-Method

Article 676064
 Lot-No. 803565
 Column L=250mm, ID=4.6mm; Luna-Omega C18, 100A, 5µm
 Eluent A Acetonitrile
 Eluent B 0.1 % Phosphoric acid (Water)
 Gradient

time	%A	%B
0min	0	100
22.5min	90	10
25min	90	10

Flow 1.0 ml min⁻¹
 Detector UV-220nm
 Injection-Volume 5 µl
 Sample 0.3 mg ml⁻¹ (Water)



Detector A - 1 (220nm)			
Retention Time	Height	Area	Area Percent
8,550	709	11902	0,72
9,217	441	3179	0,19
9,742	449	10541	0,64
11,408	220	1750	0,11
11,700	307049	1607869	96,96
12,108	184	1173	0,07
12,450	1223	17622	1,06
13,258	91	1918	0,12
13,808	248	1650	0,10
15,217	52	698	0,04
Totals	310666	1658302	100,00

Exemplary chromatogram of given method.

Version	Article	Lot	Reason for Change	Date
2.2	676064	803565	Text update	22 Jun 2021