

**674898**                      **Lot: 814398**  
**Cefuroxime sodium salt**1. General Information

Formula	C <sub>16</sub> H <sub>15</sub> N <sub>4</sub> NaO <sub>8</sub> S	Expiry Date	01 Dec 2026
<b>Mol. Weight</b>	<b>446.37 g/mol</b>	Store at	4°C (in the dark)
CAS-No.	56238-63-2		

2. Batch Analysis

Identity	confirmed by LC-MS		
<b>Overall Purity</b>	<b>95.45 % (g/g)</b>	<b>Expanded Uncertainty</b>	<b>0.54 % (g/g)</b>
Assay Purity (HPLC)	97.40 % (g/g)	Uncertainty	0.25 % (g/g)
Water	2.0 % (g/g)		

Certified on 17 Nov 2022



by Heike Uhlig

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.

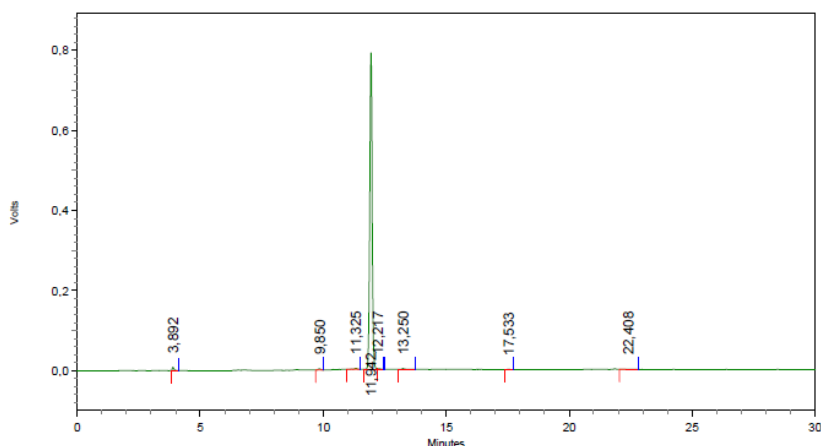
Our standards are for laboratory use only and can be used as reference material for calibration of chromatographic systems or related analytical techniques. For handling instructions see the MSDS. A minimum sample of 2 mg is recommended. Deploying less material will increase the uncertainty. The material 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 certified reference materials.

**HPLC-Method**

Article 674898  
 Lot-No. 814398  
 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  
     30min                      90                      10  
 Flow 1.0 ml min<sup>-1</sup>  
 Detector UV-220nm  
 Injection-Volume 5 µl  
 Sample 0.3 mg ml<sup>-1</sup> (Acetonitrile)



Detector A - 1 (220nm)

Retention Time	Height	Area	Area Percent
3,892	8792	43503	0,78
9,850	3047	21183	0,38
11,325	2693	26289	0,47
11,942	789999	5435748	97,41
12,217	1149	8927	0,16
13,250	1968	17145	0,31
17,533	745	4850	0,09
22,408	1012	22623	0,41

Totals	809405	5580268	100,00
--------	--------	---------	--------

Exemplary chromatogram of given method.

Version	Article	Lot	Reason for Change	Date
1	674898	814398	Initial Version	17 Nov 2022