

677271
13C3-AHD

Lot: 837294

1. General Information

Formula	C3H5N3O2	Expiry Date	01 Jan 2028
Mol. Weight	118.12 g/mol	Store at	4°C (in the dark)
CAS-No.	957509-31-8	Format	Neat

2. Batch Analysis

Identity	confirmed by LC-MS		
Overall Purity	99.28 % (g/g)	Expanded Uncertainty	1.11 % (g/g)
Assay Purity (HPLC)	99.58 % (g/g)	Uncertainty	0.17 % (g/g)
Residual Solvents	0.30 % (g/g)	Uncertainty	0.10 % (g/g)

98% C13
5% O18

Certified on 12 Jan 2026



by Alexander Schulze
RM Release

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

The reported uncertainties are determined in accordance with ISO 17034 with a 95% confidence level (k=2). 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. The indicated long-term storage temperature can vary in a range of ± 4 °C.

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 by a factor 2 for half of sample and 4 for a quarter of sample. 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.

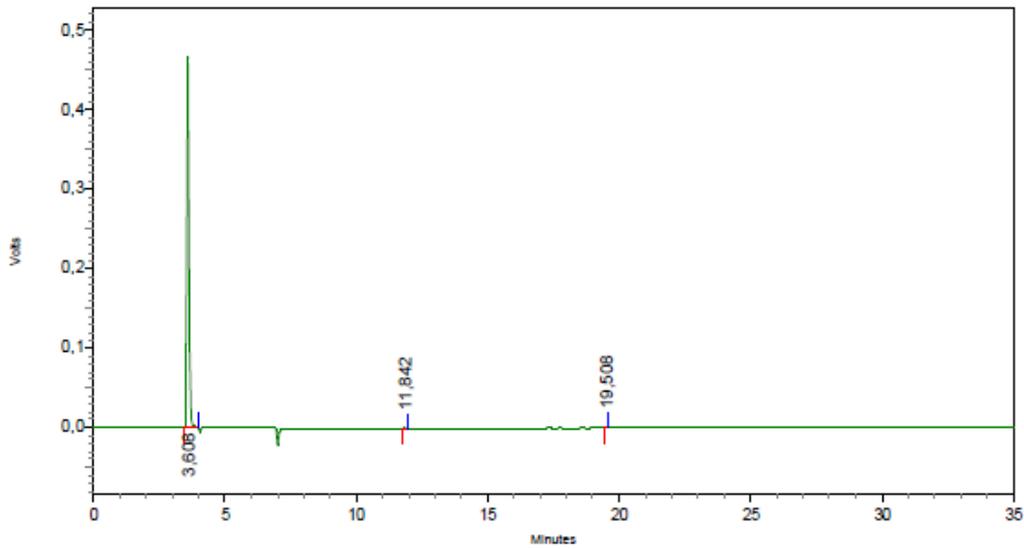
The balances used are calibrated with weights traceable to the national standards which makes them traceable to the International System of Units (SI).

The HPC Standards Inc., accredited by ANAB as indicated by the accreditation number AR-2998, has shown competence based on ISO 17034:2016 for the production of certified reference materials.



HPLC-Method

Article 677271
 Lot-No. 837294
 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 5µl
 Sample 0.5 mg ml⁻¹ (Acetonitrile)



Detector A - 1 (220nm)

Retention Time	Height	Area	Area Percent
3,608	466953	2390436	99,58
11,842	1453	8263	0,34
19,508	360	1727	0,07

Totals			
	468766	2400426	100,00

Exemplary chromatogram of given method.

Version	Article	Lot	Reason for Change	Date
1	677271	837294	Initial Version	12 Jan 2026