

691517 **Lot: 822257**
5,6-Dimethyl-2-thiouracil1. General Information

Formula	C ₆ H ₈ N ₂ OS	Expiry Date	01 Dec 2028
Mol. Weight	156.21 g/mol	Store at	4°C (in the dark)
CAS-No.	28456-54-4		

2. Batch Analysis

Identity	confirmed by LC-MS		
Overall Purity	99.89 % (g/g)	Expanded Uncertainty	0.34 % (g/g)
Assay Purity (HPLC)	99.89 % (g/g)	Uncertainty	0.17 % (g/g)

Certified on 30 Nov 2023

by Corinna Gröst
RM ReleaseThe overall purity is calculated by: $\text{Purity(\%)} = \text{Assay purity} \cdot (100 - \text{water content} - \text{impurities}) / 100$

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.

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.

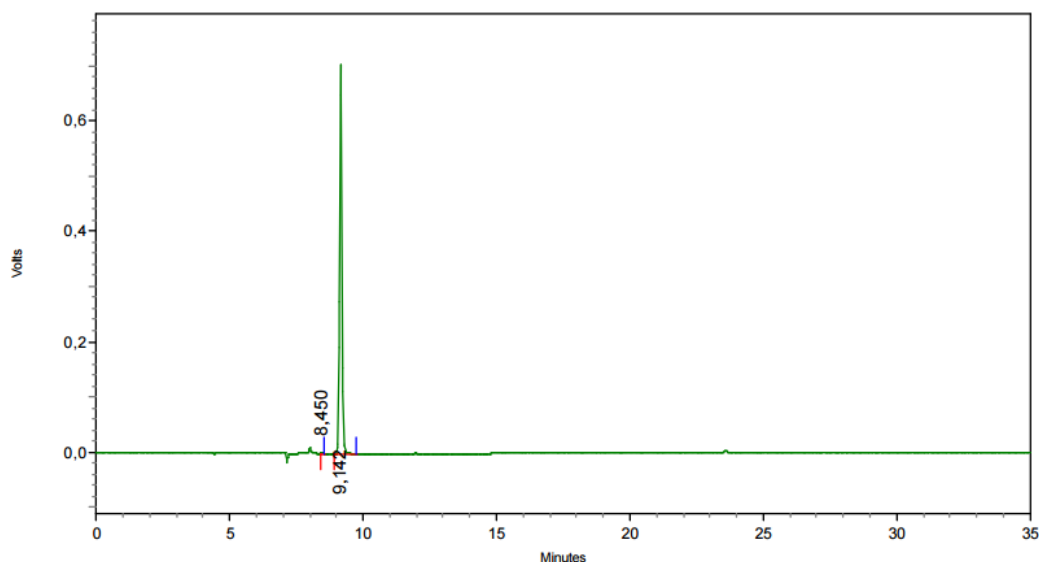
The balances used are calibrated with weights traceable to the national standards (DKD).

The HPC Standards GmbH produces reference materials according to ISO 17034. For further information, check:



HPLC-Method

Article 691517
Lot-No. 822257
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 (Acetonitrile/Water 1/1)



Detector A - 1 (220nm)

Retention Time	Height	Area	Area Percent
8,450	898	3820	0,10
9,142	704885	3754913	99,90
Totals		705783	3758733
			100,00

Exemplary chromatogram of given method.

Version	Article	Lot	Reason for Change	Date
1	691517	822257	Initial Version	30 Nov 2023