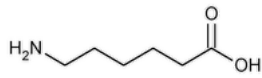


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Aminocaproic Acid



$C_6H_{13}NO_2$ 131.17
Hexanoic acid, 6-amino-;
6-Aminohexanoic acid CAS RN®: 60-32-2; UNII: U6F3787206.

DEFINITION
Aminocaproic Acid contains NLT 98.5% and NMT 101.5% of aminocaproic acid ($C_6H_{13}NO_2$), calculated on the anhydrous basis.

IDENTIFICATION
Change to read:
• **A.** [▲ SPECTROSCOPIC IDENTIFICATION TESTS \(197\), Infrared Spectroscopy: 197K ▲](#) (CN 1-MAY-2020)

ASSAY
• **PROCEDURE**
Solution A: 0.55 g/L of sodium 1-heptanesulfonate in water
Mobile phase: Dissolve 10 g of monobasic potassium phosphate in 300 mL of *Solution A*, and add 250 mL of methanol, followed by another 300 mL of *Solution A*. Adjust the mixture with phosphoric acid to a pH of 2.2, and dilute with *Solution A* to 1 L.
Internal standard solution: 1.25 mg/mL of methionine in water
Standard stock solution: 12.5 mg/mL of [USP Aminocaproic Acid RS](#) in water
Standard solution: 5.0 mL of *Standard stock solution* and 2.0 mL of *Internal standard solution* in a 100-mL volumetric flask. Dilute with water to volume.
Sample stock solution: 12.5 mg/mL of Aminocaproic Acid in water
Sample solution: 5.0 mL of *Sample stock solution* and 2.0 mL of *Internal standard solution* in a 100-mL volumetric flask. Dilute with water to volume.
Chromatographic system
(See [Chromatography \(621\), System Suitability.](#))
Mode: LC
Detector: UV 210 nm
Column: 4.6-mm × 15-cm; packing L1
Column temperature: 30°
Flow rate: 0.7 mL/min
Run time: NLT 2 times the retention time of aminocaproic acid
Injection volume: 20 µL

System suitability
Sample: *Standard solution*
[NOTE—The relative retention times for aminocaproic acid and methionine are about 0.76 and 1.0, respectively.]
Suitability requirements
Resolution: NLT 2.0 between aminocaproic acid and methionine
Relative standard deviation: NMT 2.0%

Analysis
Samples: *Standard solution* and *Sample solution*
Calculate the percentage of aminocaproic acid ($C_6H_{13}NO_2$) in the portion of Aminocaproic Acid taken:

$$\text{Result} = (R_U/R_S) \times (C_S/C_U) \times 100$$

R_U = peak response ratio of aminocaproic acid to the internal standard from the *Sample solution*

R_S = peak response ratio of aminocaproic acid to the internal standard from the *Standard solution*

C_s = concentration of [USP Aminocaproic Acid RS](#) in the *Standard solution* (mg/mL)

C_u = concentration of Aminocaproic Acid in the *Sample solution* (mg/mL)

Acceptance criteria: 98.5%–101.5% on the anhydrous basis

IMPURITIES

- [RESIDUE ON IGNITION \(281\)](#): NMT 0.1%

SPECIFIC TESTS

- [WATER DETERMINATION, Method I \(921\)](#): NMT 0.5%

ADDITIONAL REQUIREMENTS

- **PACKAGING AND STORAGE:** Preserve in tight containers. Store at room temperature.
- [USP REFERENCE STANDARDS \(11\)](#),
[USP Aminocaproic Acid RS](#)

Auxiliary Information - Please [check for your question in the FAQs](#) before contacting USP.

Topic/Question	Contact	Expert Committee
AMINOCAPROIC ACID	Documentary Standards Support	SM22020 Small Molecules 2
REFERENCE STANDARD SUPPORT	RS Technical Services RSTECH@usp.org	SM22020 Small Molecules 2

Chromatographic Database Information: [Chromatographic Database](#)

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