Product Information

6-Aminonicotinamide
Item No. 10009315

CAS Registry No.: 329-89-5
Formal Name: 6-aminonicotinamide
Synonyms: 6-AN, NSC 21206, SR 4388
MF: C₆H₇N₃O
FW: 137.1
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures
For long term storage, we suggest that 6-aminonicotinamide (6-AN) be stored as supplied at -20°C. It should be stable for at least two years.

6-AN is supplied as a crystalline solid. A stock solution may be made by dissolving the 6-AN in an organic solvent purged with an inert gas. 6-AN is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of 6-AN in these solvents is approximately 1 mg/ml.

6-AN is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 6-AN should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 6-AN has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

6-AN is a well-established inhibitor of the NADP⁺-dependent enzyme, 6-phosphogluconate dehydrogenase (Kᵢ = 0.46 μM). Through this action, 6-AN interferes with glycolysis, resulting in ATP depletion and synergizes with DNA-crosslinking chemotherapy drugs, like cisplatin, in killing cancer cells (IC₅₀ = 0.5 mM). 6-AN also reduces ATP depletion and synergizes with DNA-crosslinking chemotherapy drugs, like cisplatin, in killing cancer cells (IC₅₀ = 0.5 mM).

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References

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery. Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.