N-Formylmethamphetamine
Item No. 15634

CAS Registry No.: 42932-20-7
Formal Name: N-methyl-N-(1-methyl-2-phenylethyl)-formamide
MF: C_{11}H_{15}NO
FW: 177.2
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in methyl acetate

Laboratory Procedures

For long term storage, we suggest that N-formylmethamphetamine be stored as supplied at -20°C. It should be stable for at least one year.

N-Formylmethamphetamine is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of N-formylmethamphetamine in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of N-formylmethamphetamine is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of N-formylmethamphetamine in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

N-Formylmethamphetamine is an impurity generated in the synthesis of methamphetamine.\(^1,2\) While suggested as being a route-specific impurity of the Leuckart method, this impurity has also been detected in methamphetamine samples produced from ephedrine or by reductive amination.\(^3,4\) The physiological and toxicological properties of this compound are not known. This product is intended for forensic and research applications.

References