Mechlorethamine Hydrochloride

Chemical Name: 2-Chloro-N-(2-chloroethyl)-N-methylethanamine, N-Methylbis(2-chloroethyl)amine hydrochloride

Synonym: Nitrogen mustard, Bis(2-Chloroethyl)methylamine

Formula: C₅H₁₁Cl₂N • HCl

Formula Wt.: 192.51

Melting Point: 108-111°C

Purity: ≥98%

Solubility

Store Temp: 4°C

Ship Temp: Ambient

Description: Mechlorethamine is a nitrogen mustard DNA alkylator that binds and alkylates the N7 nitrogen on guanine and adenine bases in DNA. Mechlorethamine was initially developed as a blistering agent for use in chemical warfare but has since exhibited anticancer chemotherapeutic benefit. In vitro and in vivo, mechlorethamine forms a reactive aziridinium ion intermediate; it also can induce 5'-GNC-3' DNA crosslinks. Additionally, this compound exhibits pro-oxidative activity, increasing levels of ROS and RNS in the treatment of B-cell chronic lymphocytic leukemia (CLL), inducing oxidative stress and apoptosis.

References:


Caution: This product is intended for laboratory and research use only. It is not for human or drug use.