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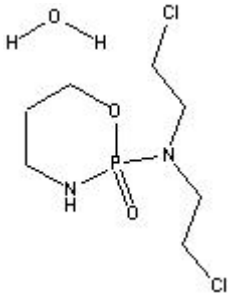
TECHNICAL INFORMATION

Catalog Number: 150749
Cyclophosphamide Monohydrate

Structure:



Molecular Formula: $C_7H_{15}Cl_2N_2O_2P \cdot H_2O$
Molecular Weight: 279.1
CAS # : 6055-19-2
Synonyms: N,N-bis(2-Chloroethyl) tetrahydro-2H-1,3,2-oxazaphosphorin-2-amine 2-oxide monohydrate; 2-[bis(2-Chloroethyl) amino] tetrahydro-2H-1,3,2-oxazophosphorine 2-oxide monohydrate; 1-bis(2-Chloroethyl) amino-1-oxo-2-aza-5-oxaphosphoridin monohydrate; bis(2-Chloroethyl) phosphamide cyclic propanolamide ester monohydrate; bis(2-Chloroethyl)phosphoramide cyclic propanolamide ester monohydrate; N,N-bis(b-Chloroethyl)-N',O-propylenephosphoric acid ester diamide monohydrate; N,N-bis(b-Chloroethyl)-N',O-trimethylenephosphoric acid ester diamide monohydrate; Cyclophosphane; Cytophosphane; B-518
Physical Description: White crystalline powder
Solubility: Soluble in water (40 mg/ml - clear, colorless solution). Slightly soluble in ethanol, benzene, ethylene glycol, carbon tetrachloride, dioxane; sparingly soluble in ether and acetone.[1]
Description: A cytotoxic nitrogen mustard derivative widely used in cancer chemotherapy. It cross-links DNA, causes strand breakage, and induces mutations. Its clinical activity is associated with a decrease in aldehyde dehydrogenase 1 (ALDH1) activity.
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