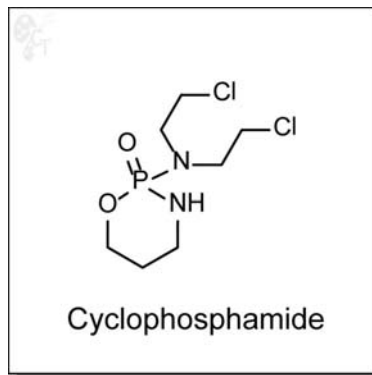


## Product Specification Sheet

**Product Name:** Cyclophosphamide

**Catalog Number:** C2936



**Technical information:**

Chemical Formula:  $C_7H_{15}Cl_2N_2O_2P \cdot H_2O$

CAS #: 6055-19-2

Molecular Weight: 261.09

Purity: > 99%

Appearance: White Crystalline solid

Solubility: Soluble in DMSO up to 100 mM

Chemical Name: (RS)-N,N-bis(2-chloroethyl)-1,3,2-oxazaphosphinan-2-amine 2-oxide

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

- Handling:**
- To make 10 mM stock solution, add 0.383mL of DMSO for each mg of Cyclophosphamide
  - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:** Cyclophosphamide, an immunosuppressant administered either orally or intravenously, is an antineoplastic prodrug metabolized by P450 enzymes to phosphoramidate mustard and acrolein which in turn alkylate DNA and proteins, respectively [1]. It is widely used in the treatment of chronic lymphocytic leukemia, lymphomas, and soft tissue and osteogenic sarcomas. [2]

Cyclophosphamide was shown to induce apoptosis in wt 9L gliosarcoma cells that did not express Bcl-2. Bcl-2 diminishes cyclophosphamide's cytotoxic activity, but not cytostatic activity. [1]

- Reference:**
1. Schwartz et al., Cyclophosphamide induces caspase 9-dependent apoptosis in 9L tumor cells. Mol. Pharmacol. 2001, 60(6), 1268-1279. Pubmed ID: 11723234
  2. Cyclophosphamide IARC monograph

To reorder: <http://www.cellagentech.com/Cyclophosphamide/>

For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

*Chemicals are sold for research use only, not for clinical or diagnostic use.*