



# LKT Laboratories, Inc.

## Estramustine Phosphate Disodium

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lktlabs.com](mailto:getinfo@lktlabs.com)  
Web: [lktlabs.com](http://lktlabs.com)

### Product Information

Product ID E7579

CAS No. 52205-73-9

Chemical Name

Synonym

Formula  $C_{23}H_{30}Cl_2NO_6PNa_2$

Formula Wt. 564.35

Melting Point

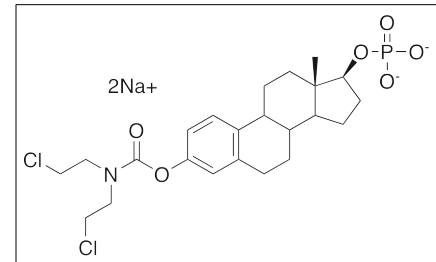
Purity  $\geq 95\%$

Solubility

Store Temp 4° C

Ship Temp Ambient

**Description** Estramustine is a derivative of estradiol and the nitrogen mustard mechlorethamine that is clinically used to treat prostate cancer. Estramustine primarily exerts its anticancer chemotherapeutic activity through antimetabolic actions. Estramustine acetylates microtubules, stabilizing them and inducing depolymerization, resulting in apoptosis across a variety of cancer cell types. Estramustine also increases DNA fragmentation in glioma cells and tumors (in vivo), but not in normal tissue.



**Bulk quantities available upon request**

Product ID	Size
E7579	25 mg
E7579	100 mg
E7579	250 mg
E7579	1 g

**References** Matsumoto K, Tanaka N, Hayakawa N, et al. Efficacy of estramustine phosphate sodium hydrate (EMP) monotherapy in castration-resistant prostate cancer patients: report of 102 cases and review of literature. *Med Oncol.* 2013 Dec;30(4):717. PMID: 24005812.

Mohan R, Panda D. Kinetic stabilization of microtubule dynamics by estramustine is associated with tubulin acetylation, spindle abnormalities, and mitotic arrest. *Cancer Res.* 2008 Aug 1;68(15):6181-9. PMID: 18676841.

Yoshida D, Hoshino S, Shimura T, et al. Drug-induced apoptosis by anti-microtubule agent, estramustine phosphate on human malignant glioma cell line, U87MG; in vitro study. *J Neurooncol.* 2000 Apr;47(2):133-40. PMID: 10982154.

Panda D, Miller HP, Islam K, et al. Stabilization of microtubule dynamics by estramustine by binding to a novel site in tubulin: a possible mechanistic basis for its antitumor action. *Proc Natl Acad Sci U S A.* 1997 Sep 30;94(20):10560-4. PMID: 9380674.

Punzi JS, Duax WL, Strong P, et al. Molecular conformation of estramustine and two analogues. *Mol Pharmacol.* 1992 Mar;41(3):569-76. PMID: 1545778.

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