

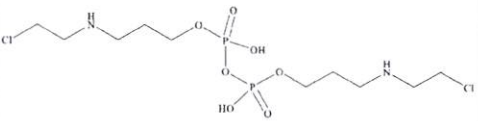
## Certificate of Analysis

Certificate No.: 20241107508



Date: November 7, 2024

Retest date: November 4, 2027

<b>Compound Name:</b> Ifosfamide EP Impurity B	
<b>Synonyms:</b>	<i>P,P'</i> -bis[3-[(2-chloroethyl)amino]propyl] ester-Diphosphoric acid
<b>TLC Catalogue Number:</b>	I-067003
<b>CAS Number:</b>	241482-18-8
<b>Molecular Weight:</b>	417.16
<b>Molecular Formula:</b>	C <sub>10</sub> H <sub>24</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>7</sub> P <sub>2</sub>
<b>Source:</b>	TLC Pharmaceutical Standards
<b>Source Lot No.:</b>	3793-047A4
<b>Storage Conditions:</b>	Store at 2-8 °C
<b>Solubility:</b>	Solution of Water and Acetonitrile



Test Description	Specifications	Results
<b>Visual Description</b>	White to off-white solid	<b>Conforms</b>
<b>Identification</b>		
IR	Conforms to structure	<b>Conforms</b>
MS	Conforms to structure	<b>Conforms</b>
<sup>1</sup> H NMR	Conforms to structure	<b>Conforms</b>
<b>Purity (HPLC)</b>	Not less than 95.0%	<b>99.9%</b>
<b>Impurity (HPLC)</b>	N/A	
<b>Water Content (KF)</b>	N/A	<b>1.3%</b>
<b>Residual Solvents (NMR)</b>	0.3% acetone	
<b>Assay (%)</b>	Not less than 90.0%	<b>98.3%</b>
<b>Recommendation:</b>	<b>Release.</b>	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		11/08/2024
Approved by:	Quality Assurance		11/08/2024

**Attachments:** HPLC, IR, MS and NMR spectra.