

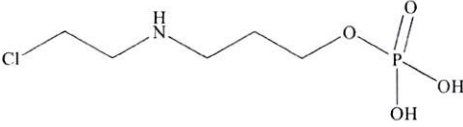


Certificate of Analysis


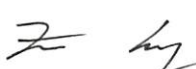
Certificate No.: 20241107507

Date: November 7, 2024

Retest date: November 4, 2027

Compound Name:	Ifosfamide EP Impurity A	
Synonyms:	3-((2-chloroethyl)amino)propyl dihydrogen phosphate	
TLC Catalogue Number:	I-067002	
CAS Number:	22608-58-8	
Molecular Weight:	217.59	
Molecular Formula:	C ₅ H ₁₃ ClNO ₄ P	
Source:	TLC Pharmaceutical Standards	
Source Lot No.:	3658-078A2	
Storage Conditions:	Store at 2-8 °C	
Solubility:	DMSO, Water	

Test Description	Specifications	Results
Visual Description	White to off-white solid	Conforms
Identification		
IR	Conforms to structure	Conforms
MS	Conforms to structure	Conforms
¹ H NMR	Conforms to structure	Conforms
Elemental Analysis	Conforms to structure	Conforms
Purity (HPLC)	Not less than 95.0%	99.9%
Impurity (HPLC)	N/A	
Water Content (KF)	N/A	0.4%
Residual Solvents (NMR)	0.1% ethanol	
Assay (%)	Not less than 90.0%	99.4%
Recommendation:	Release.	

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.