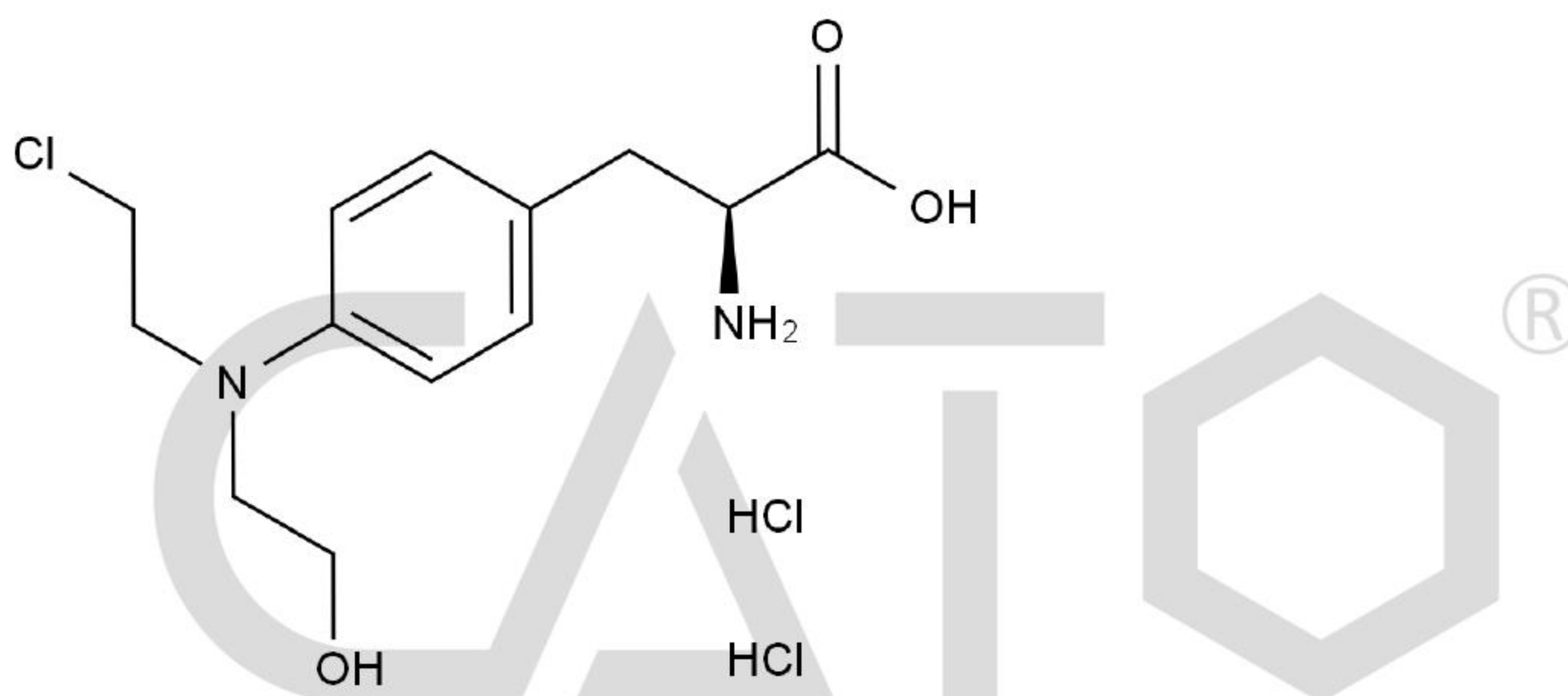


Certificate of Analysis

Reference Material & Standard

Product Name:	Melphalan EP Impurity D DiHCl (Monohydroxy Melphalan DiHCl)	Catalogue Number:	C4X-19884
Synonyms:	N/A	Lot Number:	1203-RF-0095
CAS Number:	N/A	Expiry Date:	Nov 22, 2026
Molecular Formula:	C ₁₃ H ₁₉ ClN ₂ O ₃ 2*HCl	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	286.75 2*36.46	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	96.9807%
Loss On Drying	TGA	2.964%
Assay		94.1%

Comment:

The calculation of the 100% method follows the formula (calculated on the non-dried basis):

Assay (%) = (100% - Loss On Drying) * Purity HPLC (%) / 100%

Loss On Drying is considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Lily

Reviewed by:

Hinlam

Approved by General Manager:

David

Date: Dec 04, 2024

Date: Dec 04, 2024

Date: Dec 04, 2024

