

CERTIFICATE OF ANALYSIS

(Certificate No. KME009009-01)

Release Date: 07/08/2025

Re-test Date: 06/08/2028

Enalapril Impurity D

Identification

Chemical Name :

Ethyl (2S)-2-[(3S,8aS)-3-methyl-1,4-dioxohexahydropyrrolo[1,2-a]pyrazin-2(1H)-yl]-4-phenylbutanoate (as per EP)

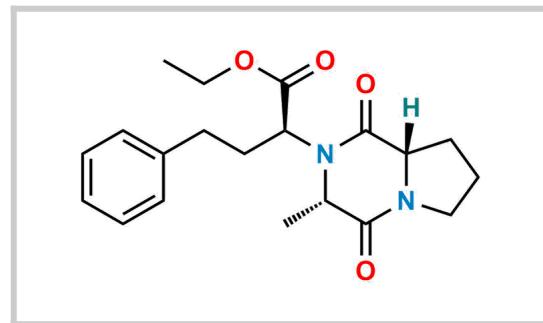
Alt. Name : Enalapril USP Related Compound D ;
Enalapril Diketopiperazine

CAT No. : KME009009

CAS No. : 115729-52-7

Molecular Formula : C₂₀H₂₆N₂O₄

Molecular Weight : 358.4



Analytical Information

Batch No. : ENA-EPD-030-359

Solubility : Acetonitrile

Description : Off White Solid

Mass : Confirm

HPLC Purity : 99.37 %

IR : Confirm

Weight Loss By TGA : 0.91 %

1H NMR : Confirm

% Potency : 98.47 %

Additional Information

Long Term Storage : Store at 2-8 deg. C for long term storage

Shipping Condition : Product is stable to be Shipped at Room Temperature

% Potency = [100 - 0.91(Weight Loss By TGA)] x [99.37(HPLC Purity)]/100 = 98.47 %
-Re-tested on 07.08.2025

Recommendation : Released

Department	Name	Signature	Date
Prepared By	Analytical	Jignesh Patel	05/01/2026
Reviewed & Approved By	Quality Control	Jatin Patel	05/01/2026

Attachments : COA, HPLC, MASS, 1HNMR, IR and TGA