

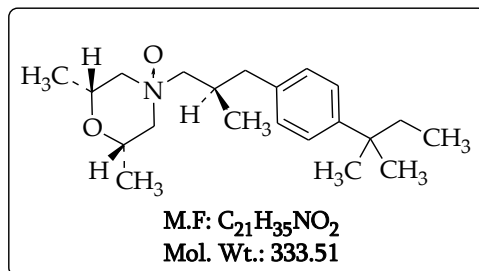
Amorolfine HCl EP-Impurities:-

Impurity-A:-

CAS No: -78613-39-5

Chemical name: -(2*RS*, 6*SR*)-4-[(2*RS*)-3-[4-(1, 1-dimethylpropyl) phenyl]-2-methylpropyl]-2,6-dimethyl morpholine-4-oxide.

Structure:-

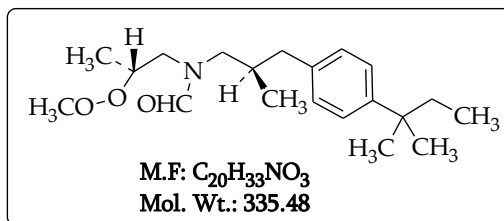


Impurity-B:-

CAS No:-142347-84-0

Chemical name: -Mixture of *N*-[(2*R*)-3-[4-(1,1-dimethylpropyl)-phenyl]-2-methylpropyl]-*N*-[(2*RS*)-(2-methylperoxy)propyl]formamide and *N*-[(2*S*)-3-[4-(1,1-dimethylpropyl)-phenyl]-2-methylpropyl]-*N*-[(2*RS*)-(2-methylperoxy)propyl]formamide.

Structure:-

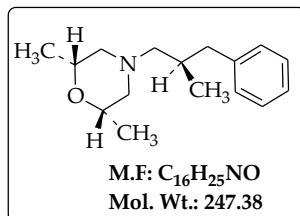


Impurity-C:-

CAS No:-78613-37-3

Chemical name:- (2*RS*, 6*SR*)-4-[(2*RS*)-2-methyl-3-phenylpropyl]-2,6-dimethylmorpholine.

Structure:-

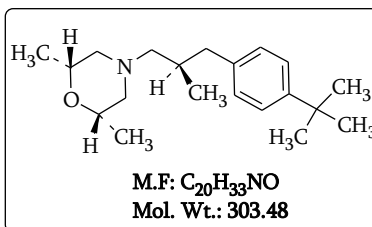


Impurity-D:-

CAS No:-

Chemical name:- (2*RS*, 6*SR*)-4-[(2*RS*)-3-[4-(1,1-dimethylethyl)phenyl]-2-methylpropyl]-2,6-dimethylmorpholine.

Structure:-

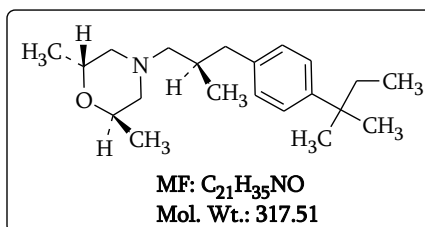


Impurity-E:-

CAS No:-78613-38-4

Chemical name:- Mixture of (2*RS*, 6*RS*)-4-[(2*R*)-3-[4-(1,1-dimethylpropyl)phenyl]-2-methylpropyl]-2,6-dimethyl morpholine and (2*RS*, 6*RS*)-4-[(2*S*)-3-[4-(1,1-dimethylpropyl)phenyl]-2-methylpropyl]-2,6-dimethyl morpholine.

Structure:-

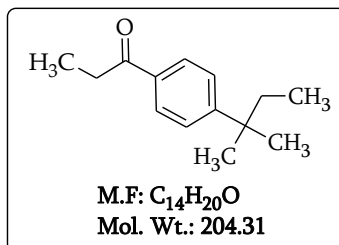


Impurity-F:-

CAS No:-

Chemical name:- 1-[4-(1,1-dimethylpropyl)phenyl]propan-1-one.

Structure:-

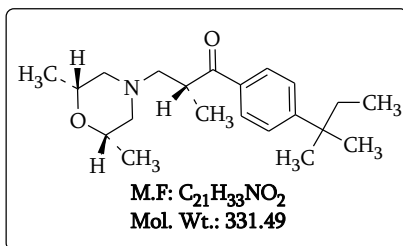


Impurity-G:-

CAS No:-

Chemical name: - (2*RS*)-3-[(2*RS*, 6*SR*)-2, 6-dimethylmorpholin-4-yl]-1-[4-(1,1-dimethylpropyl)phenyl]-2-methylpropan-1-one.

Structure:-

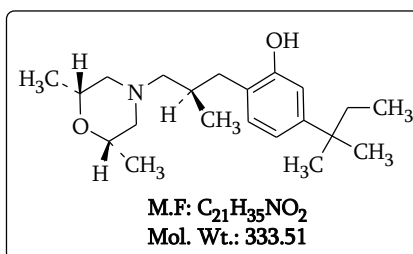


Impurity-H:-

CAS No:-

Chemical name: 2-[(2*RS*)-3-[(2*RS*, 6*SR*)-2,6-dimethylmorpholin-4-yl]-2-methylpropyl]-5-(1,1-dimethylpropyl)phenol.

Structure:-

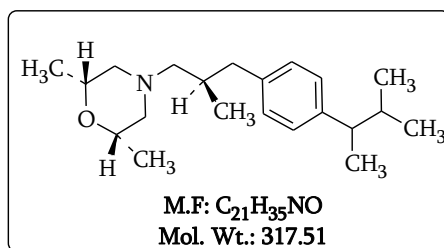


Impurity-I:-

CAS No:-67468-13-7

Chemical name: (2*RS*, 6*SR*)-4-[(2*RS*)-3-[4-(1,2-dimethylpropyl)phenyl]-2-methylpropyl]-2,6-dimethylmorpholine.

Structure:-

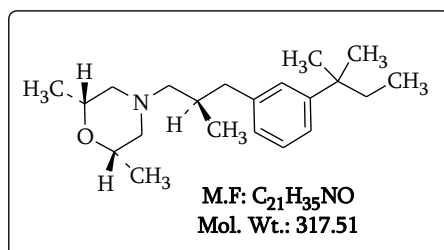


Impurity-J:-

CAS No:-

Chemical name: (2*RS*, 6*SR*)-4-[(2*RS*)-3-[3-(1,1-dimethylpropyl)phenyl]-2-methylpropyl]-2,6-dimethylmorpholine.

Structure:-

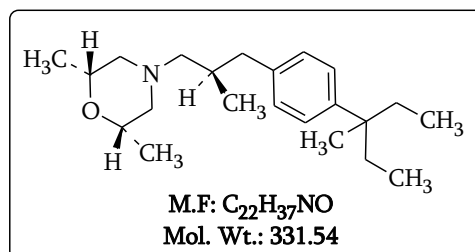


Impurity-K:-

CAS No:-

Chemical name: (2*RS*, 6*SR*)-4-[(2*RS*)-3-[4-(1-ethyl-1-methylpropyl)phenyl]-2-methylpropyl]-2,6-dimethylmorpholine.

Structure:-

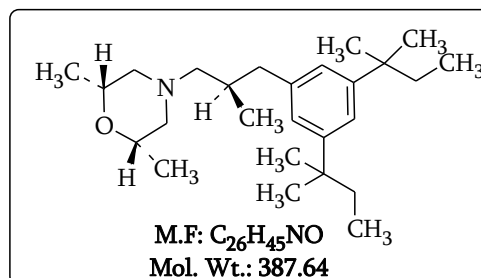


Impurity-L:-

CAS No:-

Chemical name: (2*RS*, 6*SR*)-4-[(2*RS*)-3-[3,5-bis(1,1-dimethylpropyl) phenyl]-2-methylpropyl]-2,6-dimethylmorpholine.

Structure:-



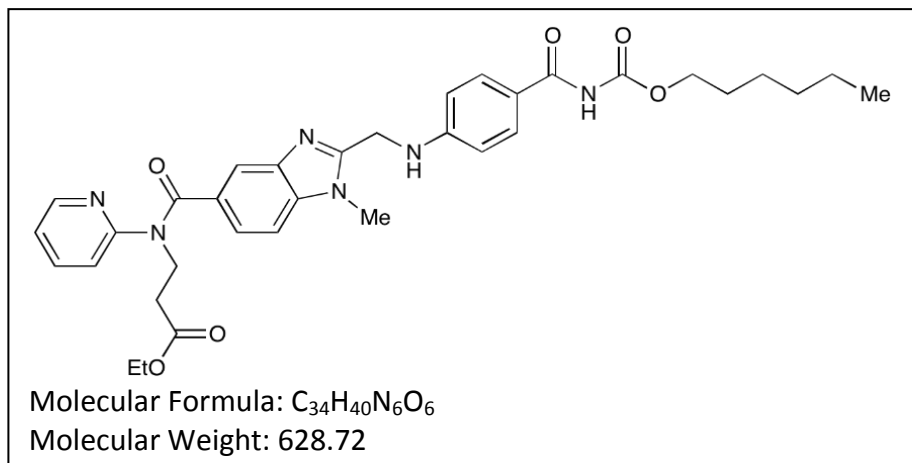
Dabigatran impurities:

Dabigatran impurity

CAS No. 1408238-40-3

Chemical Name: 3-({2-[(4-Hexyloxycarbonylamino)carbonyl-phenylamino)-methyl]-1-methyl-1H-benzoimidazole-5-carbonyl}-pyridin-2-yl-amino)-propionic acid ethyl ester

Structure:

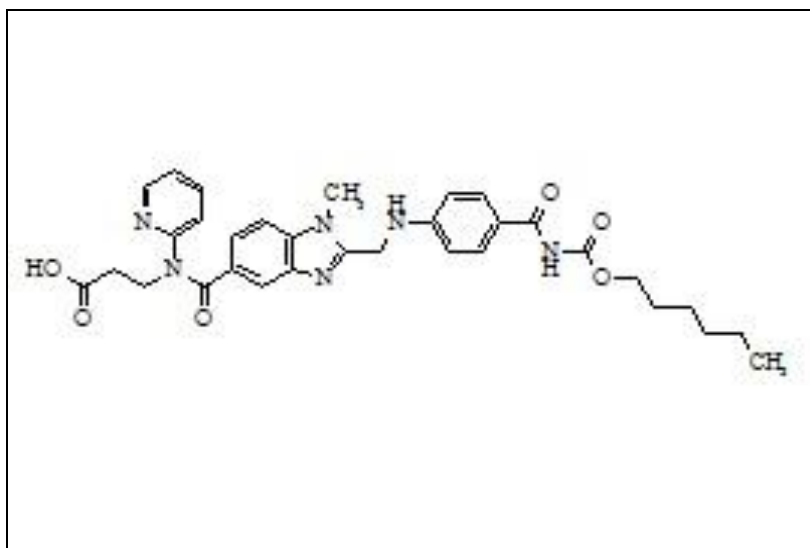


Dabigatran impurity

CAS No. 1408238-37-8

Chemical Name: 3-({2-[(4-Hexyloxycarbonylamino)carbonyl-phenylamino)-methyl]-1-methyl-1H-benzoimidazole-5-carbonyl}-pyridin-2-yl-amino)-propionic acid

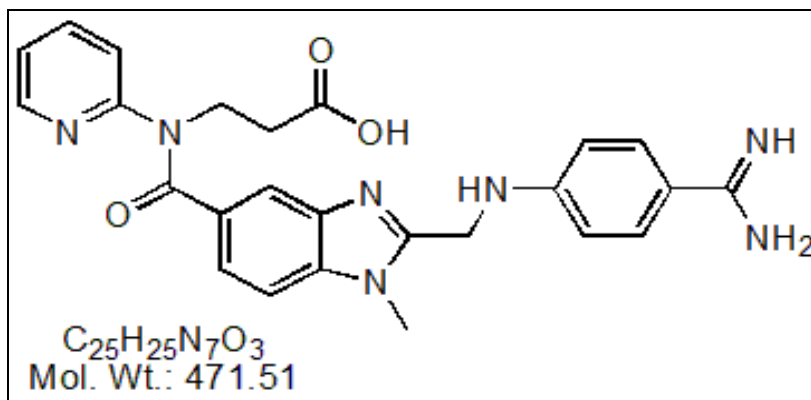
Structure:



Dabigatran impurity:

CAS No. 211914-51-1

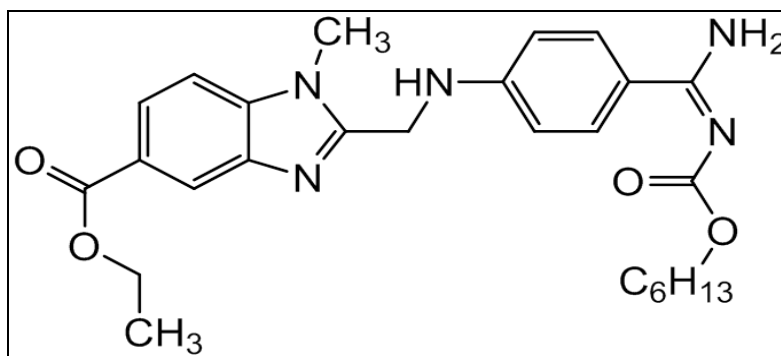
Chemical name: 3-({2-[(4-Carbamimidoyl-phenylamino)-methyl]-1-methyl-1H-benzoimidazole-5-carbonyl}-pyridin-2-yl-amino)-propionic acid



Dabigatran impurity:

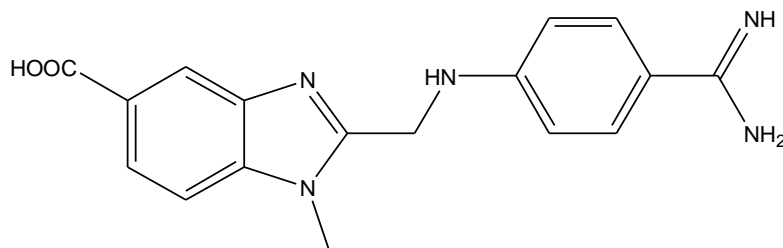
CAS No. 1408238-36-7

Chemical Name: 2-{{4-(Amino-hexyloxycarbonylimino-methyl)-phenylamino}-methyl}-1-methyl-1H-benzoimidazole-5-carboxylic acid ethyl ester



Dabigatran impurity:

Chemical Name: 2-[(4-Carbamimidoyl-phenylamino)-methyl]-1-methyl-1H-benzimidazole-5-carboxylic acid



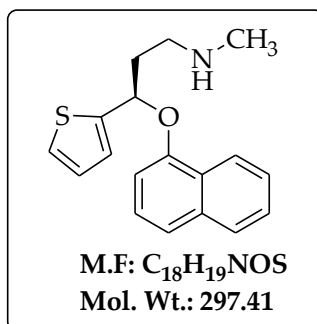
Duloxetine Hydrochloride EP - Impurities:-

Impurity A:

CAS No: 116539-60-7

Chemical name: (3R)-N-methyl-3-(naphthalen-1-yloxy)-3-(thiophen-2-yl) propan-1-amine

Structure:

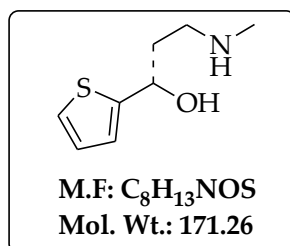


Impurity B:

CAS No: 116539-55-0

Chemical name: (1S)-3-(methyl amino)-1-(thiophen-2-yl) propan-1-ol

Structure:

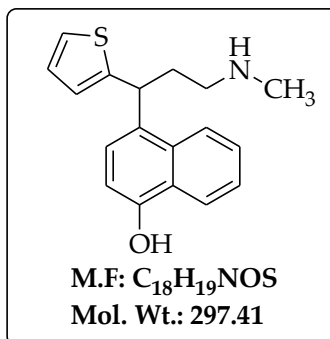


Impurity C:

CAS No: 949095-98-1

Chemical name: 4-[(1*RS*)-3-methylamino)-1-(thiophen-2-yl) propyl] naphthalene-1-ol.

Structure:

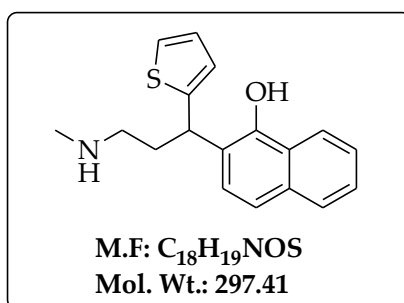


Impurity E:

CAS No: 1033803-59-6 (base); 1033719-36-6 (HCl salt)

Chemical name: 1-[(1*RS*)-3-(methyl amino)-1-(thiophen-2-yl) propyl] naphthalene-2-ol.

Structure:

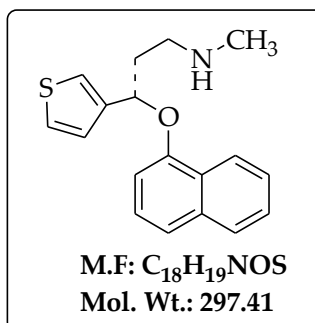


Impurity F:

CAS No: 116817-28-8

Chemical name: (3*S*)-*N*-methyl-3-(naphthalene-1-yloxy)-3-(thiophen-3-yl)propan-1-amine.

Structure:

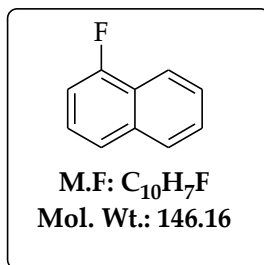


Impurity G:

CAS No: 321-38-0

Chemical name: 1-fluoronaphthalene.

Structure:



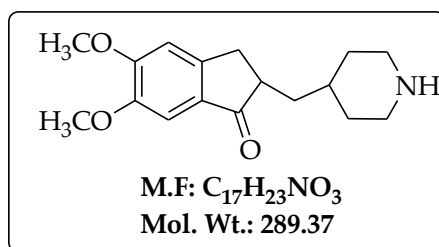
Donepezil Hydrochloride:-

Impurity-A:-

CAS No: 120014-30-4

Chemical name: 5, 6-Dimethoxy-2-(piperidin-4-ylmethyl)-indan-1-one

Structure:

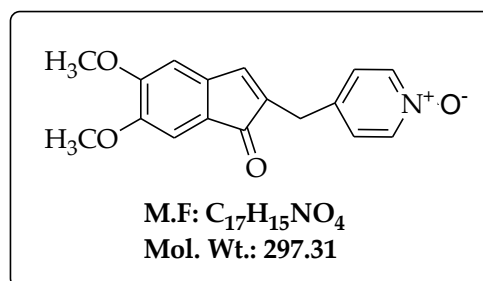


Impurity-B: -

CAS No:

Chemical name: (E)-4-[(5,6-Dimethoxy-1-oxo-1H-inden-2-yl)methyl]pyridine1-oxide

Structure:

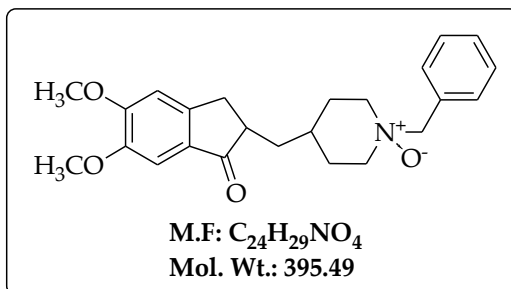


Impurity-C:-

CAS No:

Chemical name: 1-Benzyl-4-[(5,6-dimethoxy-1-oxo-2,3-dihydro-1*H*-inden-2-yl)methyl]piperidine 1-oxide

Structure:

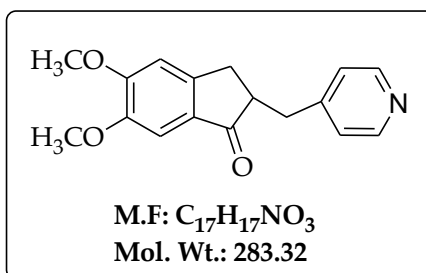


Impurity-D:-

CAS No: 4803-57-0

Chemical name: 5,6-Dimethoxy-2-(pyridin-4-ylmethyl)indan-1-one

Structure:

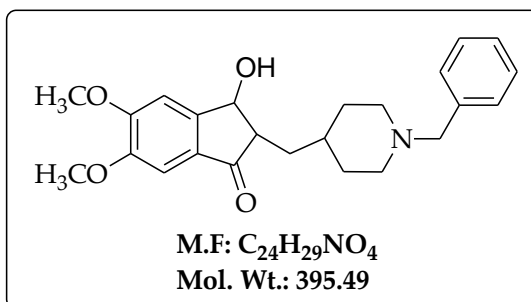


Impurity-E:-

CAS No:

Chemical name: 2-[(1-Benzylpiperidin-4-yl) methyl]-3-hydroxy-5,6-dimethoxy-1*H*-indan-1-one

Structure:

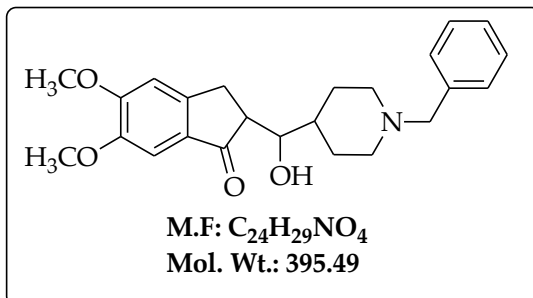


Impurity-F:-

CAS No:

Chemical name: 2-[(1-Benzylpiperidin-4-yl)(hydroxy)methyl]-5,6-dimethoxyindan-1-one

Structure:

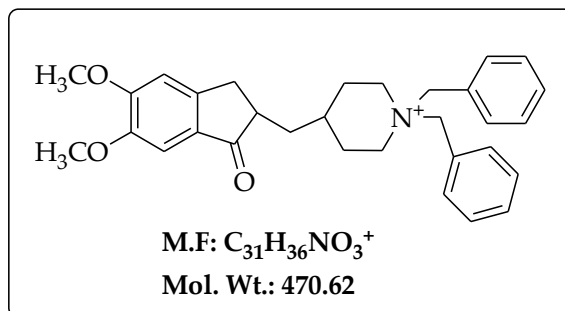


Impurity-G:-

CAS No:

Chemical name: 1,1-Dibenzyl-4-[(5,6-dimethoxy-1-oxoindan-2-yl)methyl]piperidinium.

Structure:

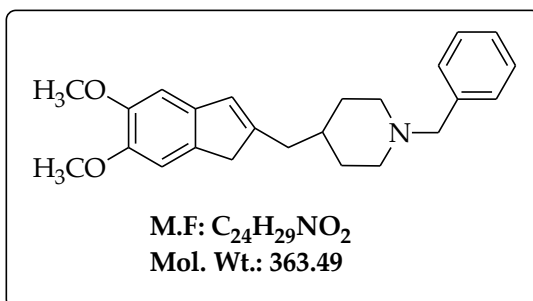


Impurity-H:-

CAS No: 120013-45-8

Chemical name: 1-Benzyl-4-[(5,6-dimethoxyinden-2-yl)methyl]piperidine

Structure:

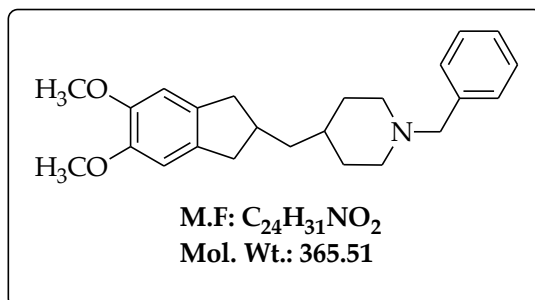


Impurity-I:-

CAS No: 1034439-57-0

Chemical name: 1-Benzyl-4-[(5,6-dimethoxyinden-2-yl)methyl]piperidine

Structure:



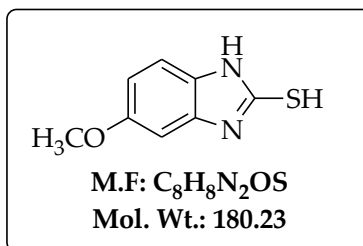
Esomeprazole Magnesium Di & Trihydrate Impurities:

Impurity A:

CAS No: 37052-78-1

Chemical name: 5-methoxy-1*H*-benzimidazole-2-thiol.

Structure:

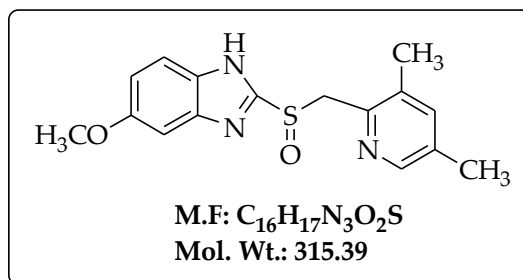


Impurity B:

CAS No: 110374-16-8

Chemical name: 2-[(*RS*)-[(3,5-dimethylpyridin-2-yl)methyl]sulfinyl]-5-methoxy-1*H*-benzimidazole

Structure:

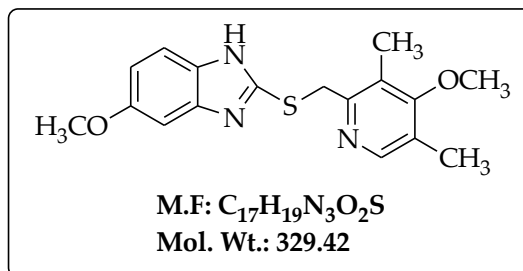


Impurity C:

CAS No: 73590-85-9

Chemical name: 5-methoxy-2-[[[(4-methoxy-3,5-dimethylpyridin-2-yl)-methyl]sulfonyl]-1H-benzimidazole (ufiprazole).

Structure:

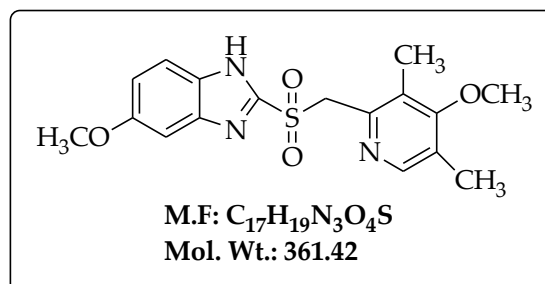


Impurity D:

CAS No: -88546-558

Chemical name: 5-methoxy-2-[[[(4-methoxy-3,5-dimethylpyridin-2-yl)-methyl]sulfonyl]-1H-benzimidazole (omeprazole sulfone).

Structure:

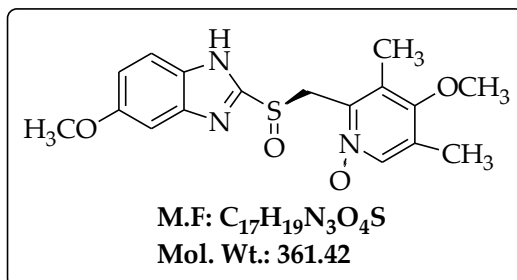


Impurity E:

CAS No: 176219-04-8

Chemical name: 4-methoxy-2-[[*(RS)*-(5-methoxy-1*H*-benzimidazol-2-yl)sulfinyl]methyl]-3,5-dimethylpyridin-1-oxide.

Structure:

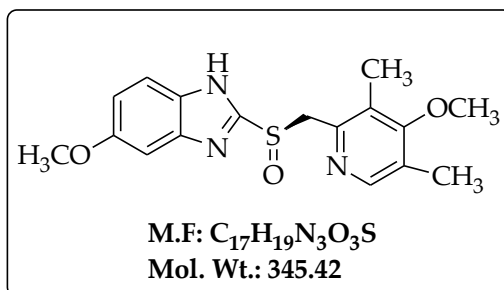


Impurity F:

CAS No: 119141-89-8

Chemical name: 5-methoxy-2-[(*R*)-[(4-methoxy-3,5-dimethylpyridin-2-yl)methyl]sulfinyl]-1*H*-benzimidazole ((*R*)-omeprazole).

Structure:



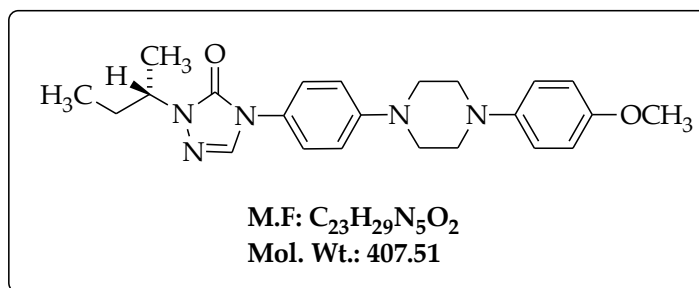
Itraconazole Impurities:-

Impurity-A:

CAS No: 252964-68-4

Chemical Name: 4-[4-[4-(4-methoxyphenyl) piperazin-1-yl]phenyl]-2-[(1*RS*)-1-methylpropyl]-2,4-dihydro-3*H*-1,2,4-triazol-3-one.

Structure:

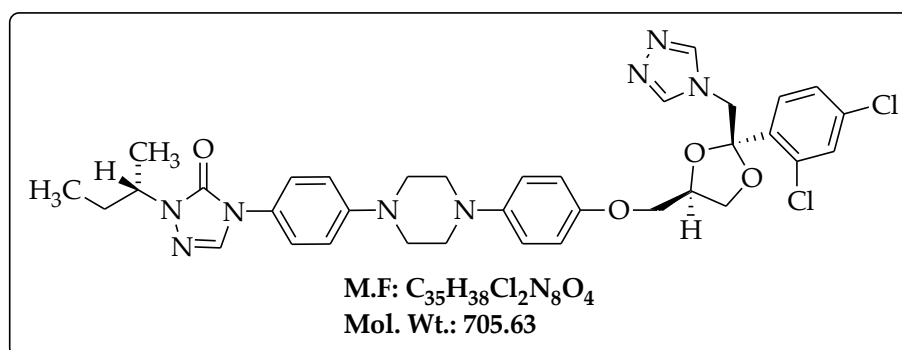


Impurity- B:

CAS No: 854372-77-3

Chemical Name: 4-[4-[4-[4[[cis-2-(2,4-dichlorophenyl)-2-(4*H*-1,2,4)triazol-4-ylmethyl)-1,3-dioxolan-4-yl] methoxy]-phenyl]piperazin-1-yl]phenyl]-2-[(1*RS*)-1-methylpropyl]-2,4-dihydro-3*H*-1,2,4-triazol-3-one.

Structure:

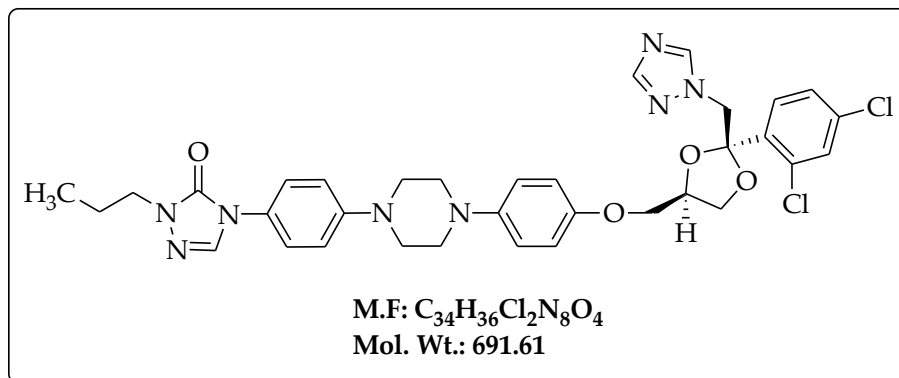


Impurity- C:

CAS No: 74855-91-7

Chemical Name: 4-[4-[4-[4-[[Cis-2-(2,4-dichlorophenyl)-2-(1*H*-1,2,4)triazol-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]-phenyl]-piperazin-1-yl]phenyl]-2-propyl-2,4-dihydro-3*H*-1,2,4-triazol-3-one.

Structure:

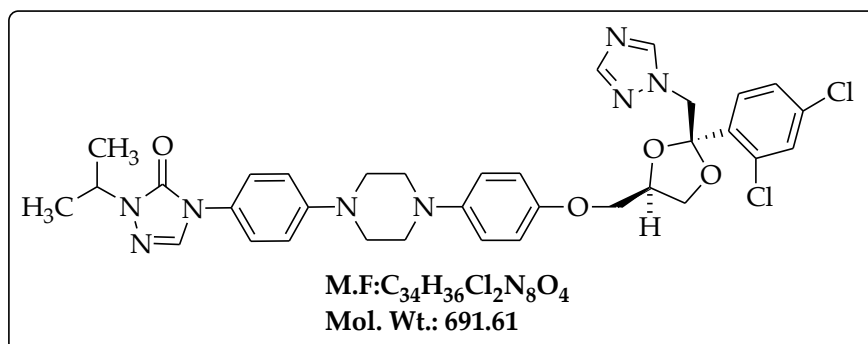


Impurity- D:

CAS No: 89848-49-7

Chemical Name: 4-[4-[4-[4-[[Cis-2-(2,4-dichlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-4-yl] methoxy]phenyl]piperazin-1-yl]phenyl]-2-(1-methylethyl)-2,4-dihydro-3H-1,2,4-triazol-3-one.

Structure:

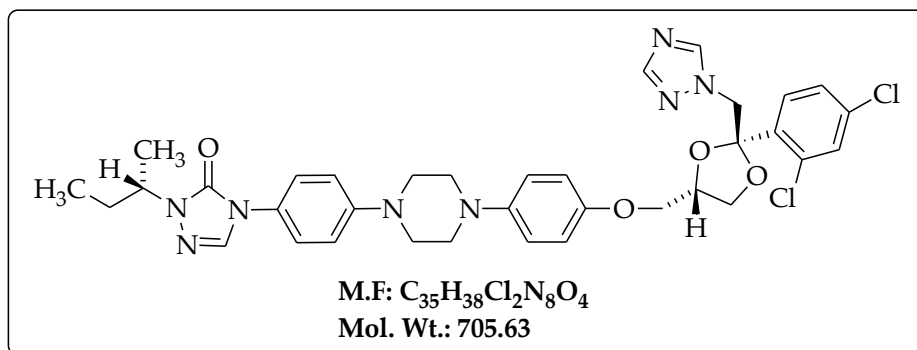


Impurity -E: Trans imp

CAS No: 84604-65-9

Chemical Name: 4-[4-[4-[4-[[trans-2-(2,4-dichlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-4-yl] methoxy]phenyl]piperazin-1-yl]phenyl]-2-[(1RS)-1-methylpropyl]-2,4-dihydro-3H-1,2,4-triazol-3-one

Structure:

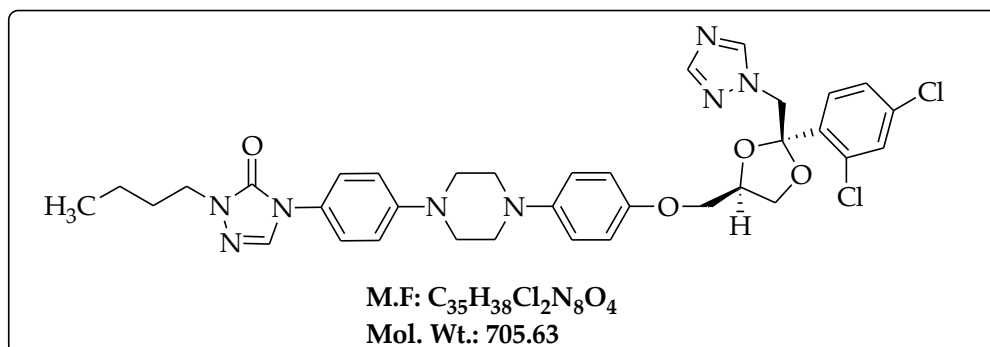


Impurity- F:

CAS No: 89848-51-1

Chemical Name: 2-butyl-4-[4-[4-[4-[[cis-2-(2,4-dichlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl]piperazin-1-yl]phenyl]-2,4-dihydro-3H-1,2,4-triazol-3-one

Structure:

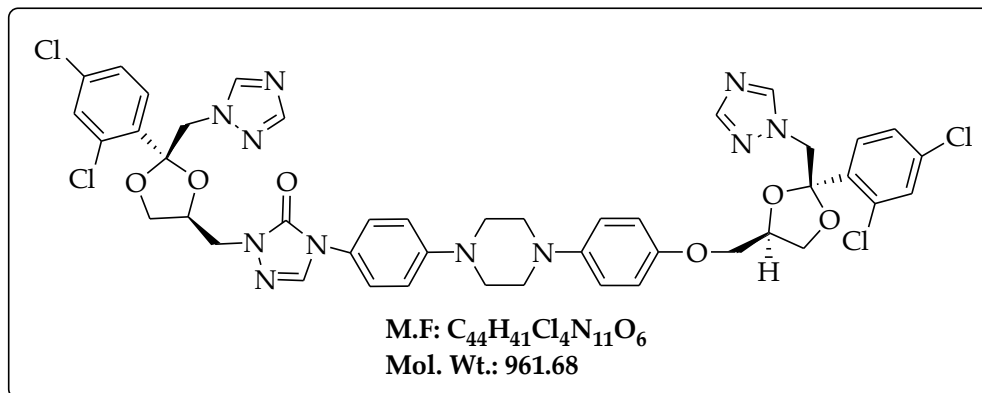


Impurity- G:

CAS No:

Chemical Name: 4-[4-[4-[4-[[cis-2-(2,4-dichlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl]piperazin-1-yl]phenyl]-2-[[cis-2-(2,4-dichlorophenyl)-2-[1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-4-yl]methyl]-2,4-dihydro-3H-1,2,4-triazol-3-one.

Structure:



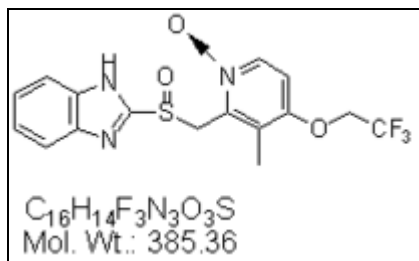
Lansoprazole impurities:

Lansoprazole EP Impurity A ;

Lansoprazole N-Oxide ;

CAS # 213476-12-1 ;

Chemical name: 2-[[[3-Methyl-1-oxido-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazole

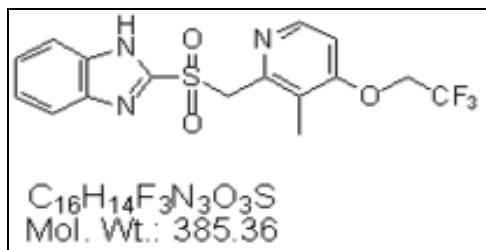


Lansoprazole EP Impurity B ;

Lansoprazole USP Related Compound A ;

Lansoprazole Sulfone ;

CAS : 131926-99-3

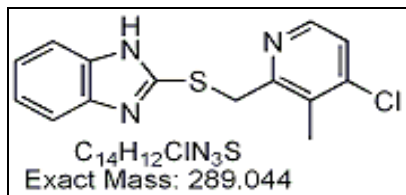


Lansoprazole EP Impurity F Sulfide ;

4-Desmethoxypropoxyl-4-Chloro Rabeprazole Sulfide ;

Chemical name: 2-[(RS)-[(4-Chloro-3-methylpyridin-2-yl)methyl]sulphanyl]-1H-benzimidazole ;

CAS # 103312-62-5 ;



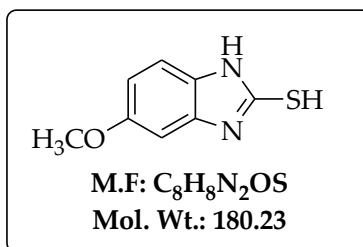
Omeprazole EP - Impurities:-

Impurity A:

CAS No: 37052-78-1

Chemical name: 5-methoxy-1H-benzimidazole-2-thiol.

Structure:

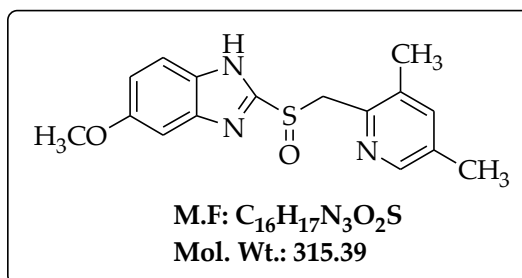


Impurity B:

CAS No: 110374-16-8

Chemical name: 2-[(RS)-[(3,5-dimethylpyridin-2-yl)methyl]sulfinyl]-5-methoxy-1H-benzimidazole

Structure:

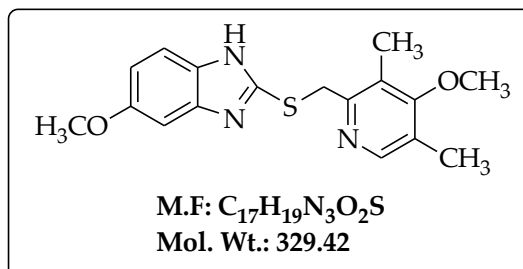


Impurity C:

CAS No: 73590-85-9

Chemical name: 5-methoxy-2-[[[(4-methoxy-3,5-dimethylpyridin-2-yl)-methyl]sulfanyl]-1H-benzimidazole (ufiprazole).

Structure:

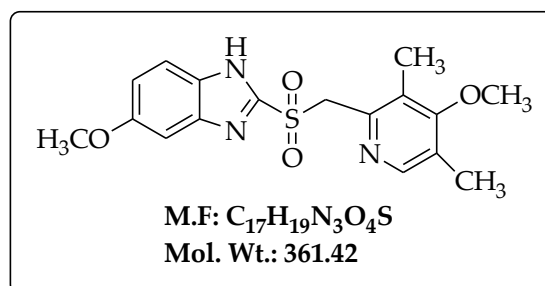


Impurity D:

CAS No: 88546-55-8

Chemical name: 5-methoxy-2-[[[(4-methoxy-3,5-dimethylpyridin-2-yl)-methyl]sulfonyl]-1H-benzimidazole (omeprazole sulfone).

Structure:

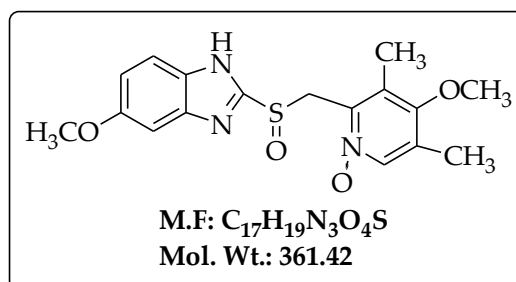


Impurity E:

CAS No: 176219-04-8

Chemical name: 4-methoxy-2-[[[(RS)-(5-methoxy-1H-benzimidazol-2-yl) sulfinyl] methyl]-3, 5-dimethylpyridin-1-oxide.

Structure:

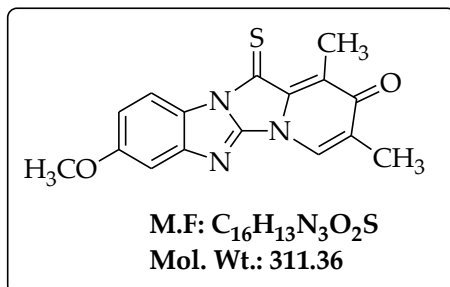


Impurity F:

CAS No: 125656-82-8

Chemical name: 1, 3-Dimethyl-8-methoxy-12-thioxopyrido [1', 2':3, 4] imidazo [1, 2-a] Benzimidazol-2(12H)-one

Structure:

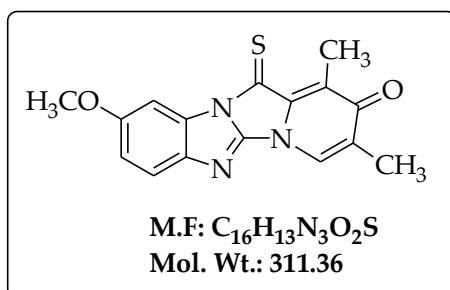


Impurity G:

CAS No: 125656-83-9

Chemical name: 1,3-Dimethyl-9-methoxy-12-thioxopyrido [1', 2':3, 4] imidazo [1, 2-a] Benzimidazol-2(12H)-one

Structure:

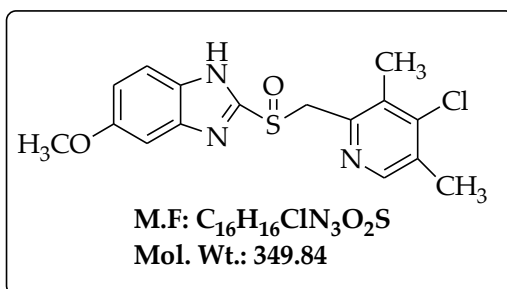


Impurity H:

CAS No: 863029-89-4

Chemical name: 2-[[[4-Chloro-3,5-dimethyl-2-pyridinyl) methyl] sulfinyl]-5-methoxy-1H-benzimidazole

Structure:

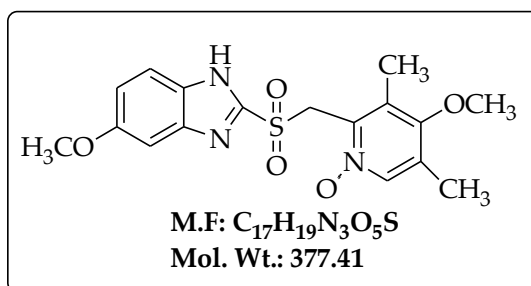


Impurity I:

CAS No: 158812-85-2

Chemical name: 5-Methoxy-2-[[[4-methoxy-3, 5-dimethylpyridin-2-yl) methyl] sulphonyl]-1H-benzimidazole N-Oxide

Structure:



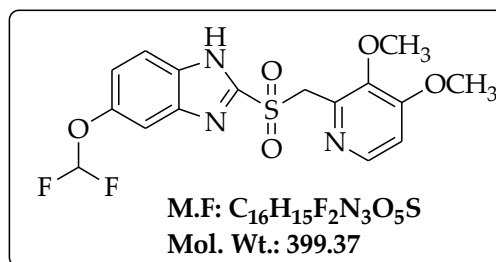
Pantoprazole EP- Impurities:

Impurity A:

CAS No: 127780-16-9

Chemical name: 5-(difluoromethoxy)-2-[[[3, 4-dimethoxypyridin-2-yl) methyl] sulfonyl]-1H-benzimidazole

Structure:

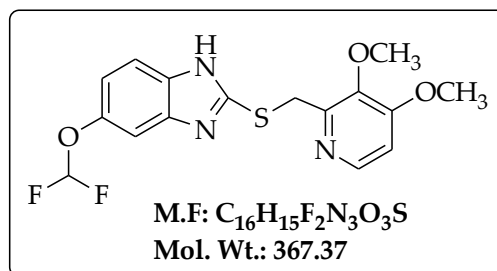


Impurity B:

CAS No: 102625-64-9

Chemical name: 5-(difluoromethoxy)-2-[[[3, 4-dimethoxypyridin-2-yl) methyl] sulfanyl]-1H-benzimidazole.

Structure:

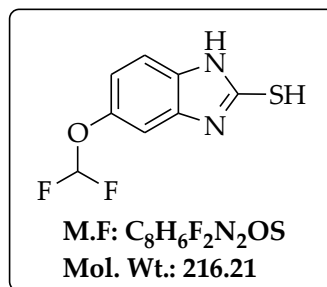


Impurity C:

CAS No: 97963-62-7

Chemical name: 5-(difluoromethoxy)-1*H*-benzimidazole-2-thiol.

Structure:

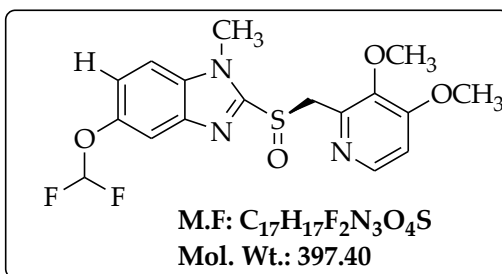


Impurity D:

CAS No: 624742-53-6

Chemical name: 5-(difluoromethoxy)-2-[(*RS*)-[(3,4-dimethoxypyridin-2-yl)methyl]sulfinyl]-1-methyl-1*H*-benzimidazole.

Structure:

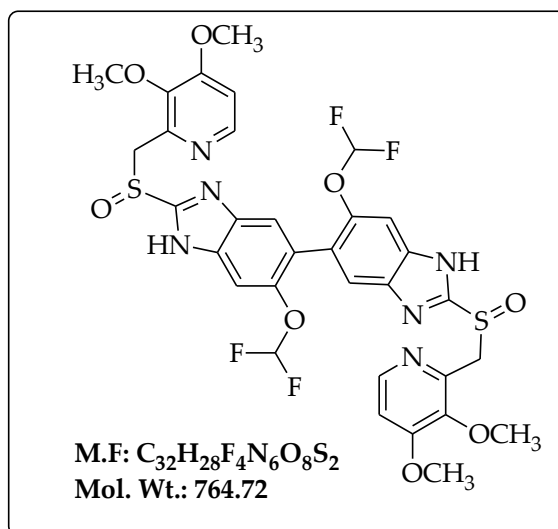


Impurity E:

CAS No:

Chemical name: Mixture of the stereo isomers of 6,6'-bis(difluoromethoxy)-2,2'-bis[[(3,4-dimethoxy pyridin-2-yl) methyl]sulfinyl]-1*H*,1'*H*-5,5'-bibenzimidazolyl.

Structure:

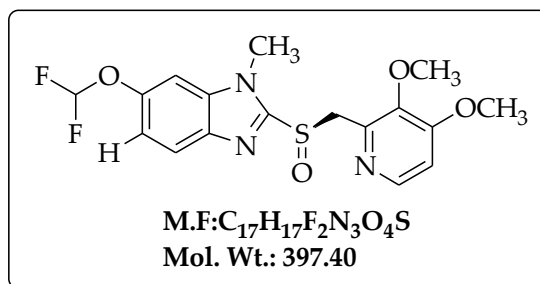


Impurity F:

CAS No: 721924-06-7

Chemical name: 6-(difluoromethoxy)-2-[(*RS*)-[(3,4-dimethoxy pyridin-2-yl)methyl]sulfinyl]-1-*H*-methyl-1*H*-benzimidazole

Structure:



Rabeprazole EP Impurities:-

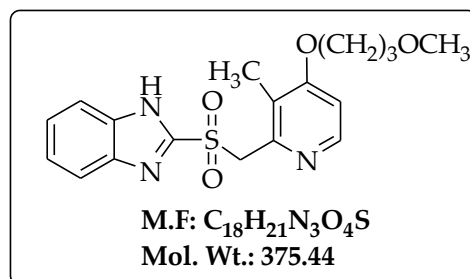
Impurity-A:-

CAS Number: - 117976-47-3

Chemical name: - 2-[[[4-(3-Methoxypropoxy)-3-methyl-pyridin-2-yl] methyl] sulfonyl] Bezimidazole

Melting Point: - 64-66°C

Structure:-



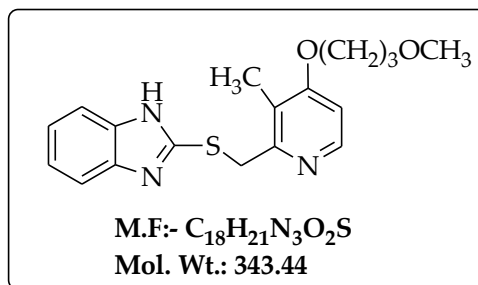
Impurity-B:-

CAS Number: - 117977-21-6

Chemical name: - 2-[[[4-(3-methoxy propoxy)- 3-methyl-pyridin-2-yl] methyl] sulfanyl]-1H-Bezimidazole

Melting Point: - 109-110°C

Structure:-



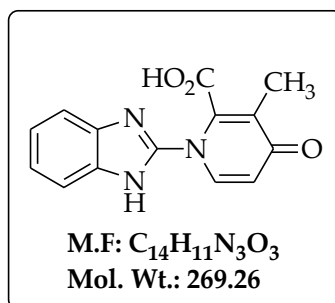
Impurity-C:-

CAS Number: - 1163685-30-0

Chemical name: - 1-(1*H*-Benzimidazol-2-yl)-3-methyl-4-oxo-1, 4-dihydropyridine-2-carboxylate

Melting Point: - 130-134°C

Structure:-



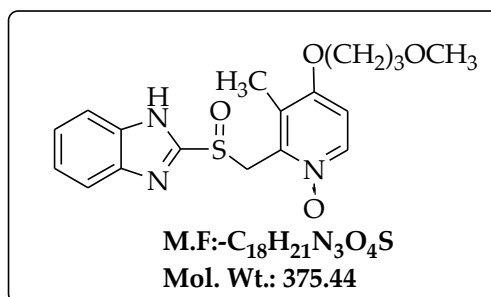
Impurity-D:-

CAS Number: - 924663-38-7

Chemical name: - 2-[[[4-(3-methoxy propoxy)-3-methyl-1-oxidopyridin-2-yl] methyl] sulfinyl]-1*H*-benzimidazole

Melting point: - 161-163°C

Structure:-



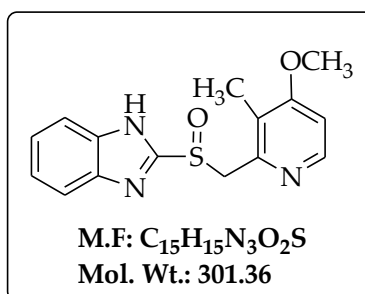
Impurity-E:-

CAS Number: - 102804-77-3

Chemical name: 2-[[[4-Methoxy-3-methylpyridin-2-yl] methyl] sulfinyl]-1*H*-benzimidazole

Melting point: - 141-143°C

Structure:-



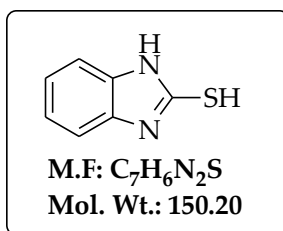
Impurity-F:-

CAS Number: - 583-39-1

Chemical name: - 1, 3-dihydro-2*H*-benzimidazole-2-thione

Melting Point: - 300-304°C

Structure:-



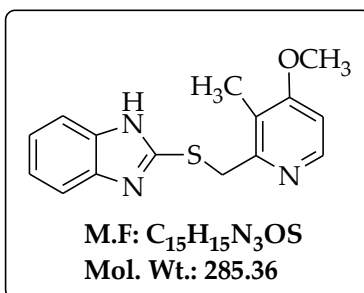
Impurity-G:-

CAS Number: - 102804-82-0

Chemical name: 2-[[[4-Methoxy-3-methylpyridin-2-yl) methyl] sulfanyl]-1*H*-benzimidazole

Melting point: -

Structure:-



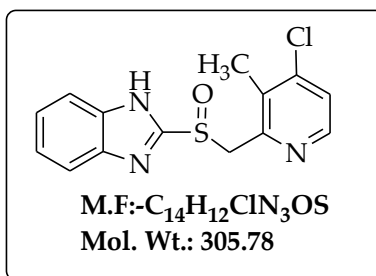
Impurity-H:-

CAS Number: - 168167-42-8

Chemical name: - 2-[[[4-chloro-3-methylpyridin-2-yl]) methyl] sulfinyl]-1*H*-benzimidazole

Melting Point: - 128-130°C

Structure:-



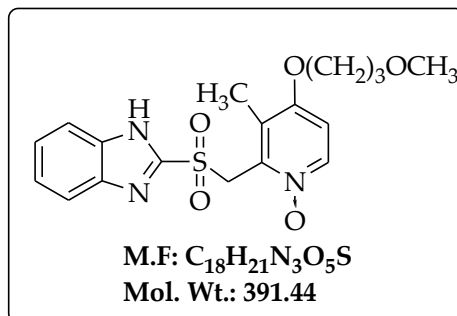
Impurity-I:-

CAS Number: - 924663-37-6

Chemical name: - 2-[[[4-(3-Methoxypropoxy)-3-methyl-1-oxido-2-pyridinyl] methyl] sulfonyl]-1H-benzimidazole

Melting Point: - 153-156°C

Structure:-



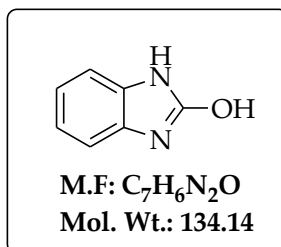
Impurity-K:-

CAS Number: - 615-16-7

Chemical name: - 1H-Benzoimidazol-2-ol

Melting Point: - 314-316°C

Structure:-



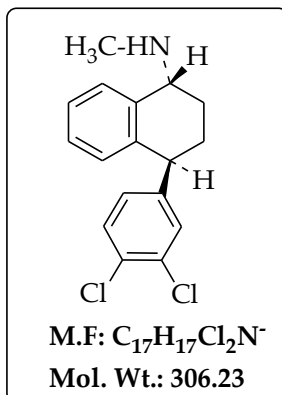
Sertraline EP- Impurities:-

Impurity -A:

CAS No: 79836-45-6

Chemical name: (1*RS*, 4*SR*)-4-(3, 4-dichlorophenyl)-*N*-methyl-1, 2, 3, 4-tetrahydronaphthalen-1-amine

Structure:

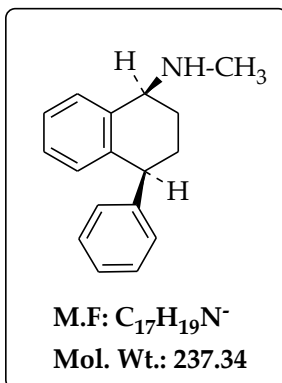


Impurity -B:

CAS No: 52758-03-9

Chemical name: (1*RS*, 4*RS*)-*N*-methyl-4-phenyl-1, 2, 3, 4-tetrahydronaphthalen-1-amine

Structure:

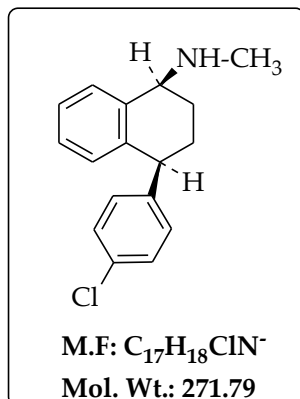


Impurity -C:

CAS No: 79646-00-7

Chemical name: (1*RS*, 4*RS*)-4-(4-chlorophenyl)-*N*-methyl-1, 2, 3, 4-tetrahydronaphthalen-1-amine

Structure:

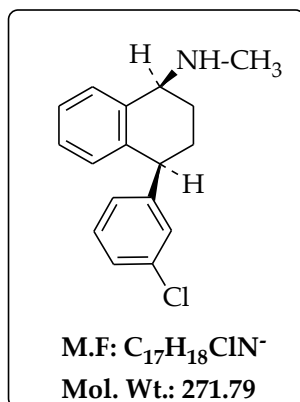


Impurity -D:

CAS No: 871838-58-3

Chemical name: (1*RS*, 4*RS*)-4-(3-chlorophenyl)-*N*-methyl-1, 2, 3, 4-tetrahydronaphthalen-1-amine

Structure:

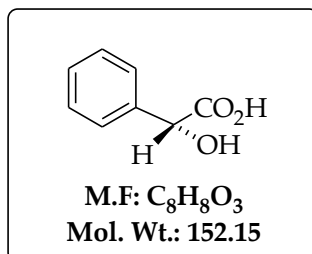


Impurity -E:

CAS No: 611-71-2

Chemical name: (2*R*)-hydroxyphenylacetic acid ((*R*))-mandelic acid

Structure:

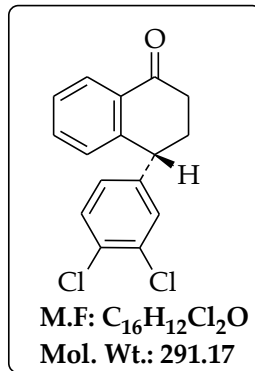


Impurity -F:

CAS No: 155748-61-1

Chemical name: (4R)-4-(3, 4-dichlorophenyl)-3, 4-dihydronaphthalen-1(2H)-one

Structure:

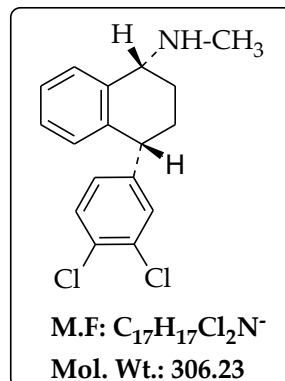


Impurity -G:

CAS No: 79617-98-4

Chemical name: (1R, 4R)-4-(3, 4-dichlorophenyl)-N-methyl-1, 2, 3, 4-tetrahydronaphthalen-1-amine (Sertraline enantiomer)

Structure:

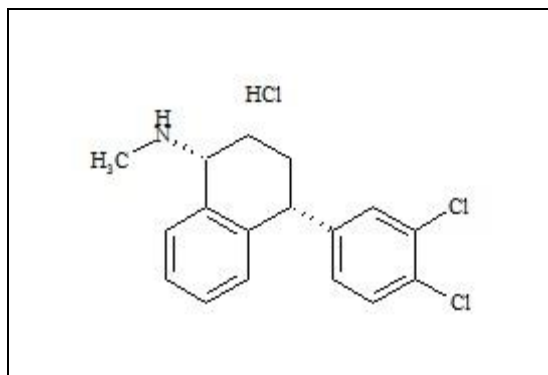


Sertraline HCl EP impurity G:

CAS No.:79645-15-1

Molecular Formula: **C₁₇H₁₇Cl₂N. HCl**

Structure:



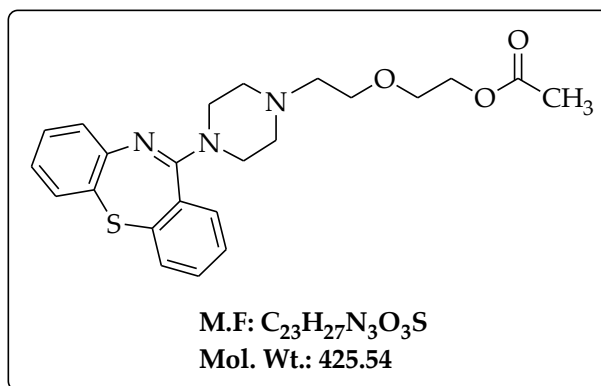
Quetiapine hemifumarate EP-impurities:-

1. Impurity-A

CAS No: - 844639-07-2

Chemical Name: - 2-[2-[4-(dibenzo [b, f] [1, 4] thiazepin-11-yl) piperazin-1-yl] ethoxy] ethyl acetate

Structure:-

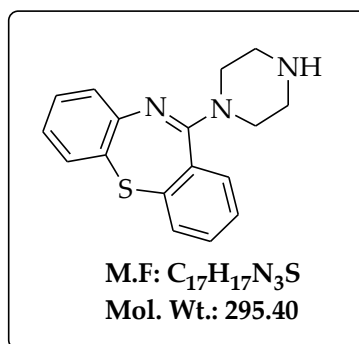


2. Impurity-B

CAS No: - 5747-48-8

Chemical Name: - 11-(piperazin-1-yl) dibenzo [b, f] [1, 4] thiazepine

Structure:-

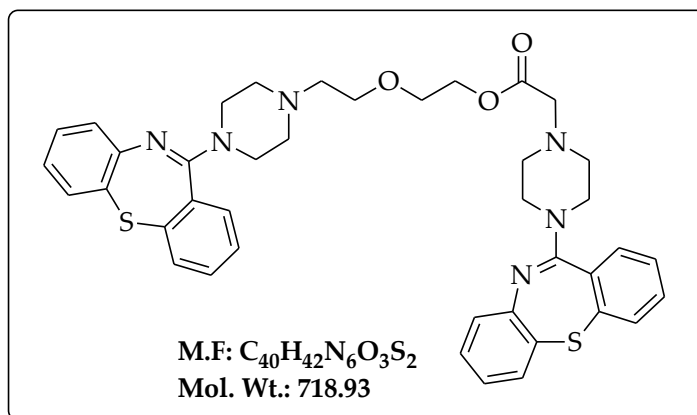


3. Impurity-C

CAS No: -

Chemical Name: - 2-[2-[4-(dibenzo [b, f][1,4]thiazepin-11-yl)piperazin-1-yl]ethoxy]ethyl[4-(dibenzo [b, f] [1, 4] thiazepin-11-yl) piperazin-1-yl] acetate

Structure:-

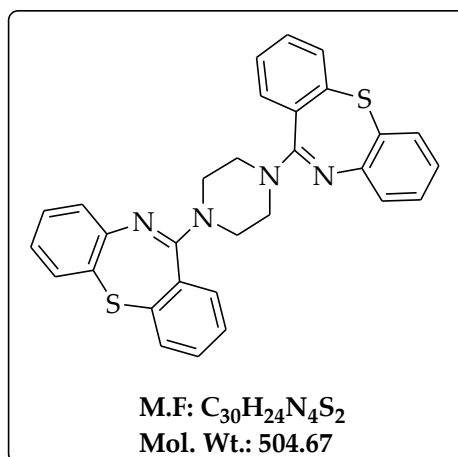


4. Impurity-D

CAS No: - 945668-94-0

Chemical Name: - 11, 11'-(Piperazin-1, 4- diyl) bis (dibenzo [b, f] [1, 4] thiazepine)

Structure:-



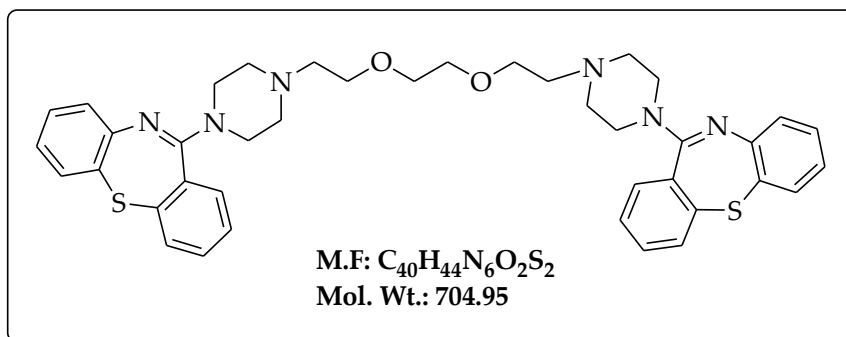
5. Impurity-E

CAS No: - 1371638-05-9

Chemical Name: - 11, 11'-[ethane-1, 2-diyl bis (oxyethane-2, 1-diyl)piperazine-4, 1-diyl]

bis (dibenzo [b, f] [1, 4] thiazepine)

Structure:-

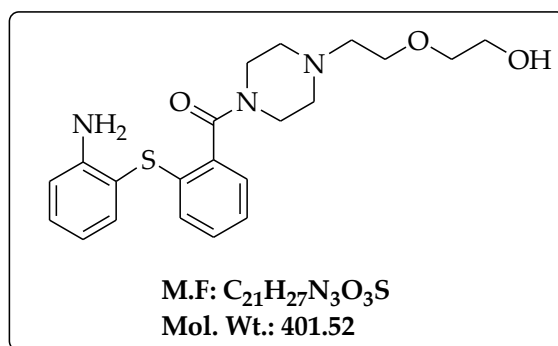


6. Impurity-F

CAS No: - 848814-27-7

Chemical Name: - [2-[(2-amino-phenyl) thio] phenyl]-{4-[2-(2-hydroxy-ethoxy)-ethyl]-piperazin-1-yl}-methanone

Structure:-

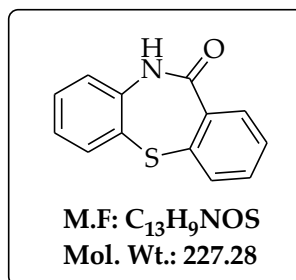


7. Impurity-G

CAS No: - 3159-07-7

Chemical Name: - Dibenzo [b, f] [1, 4] thiazepin-11(10H)-one

Structure:-



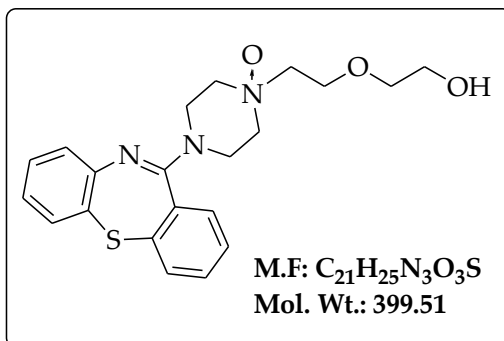
8. Impurity-H

CAS No: - 1076199-40-0

Chemical Name: - 2-[2-[4-(dibenzo [b, f] [1, 4] thiazepin-11-yl)-]-oxidopiperazin-1-yl]

ethoxy] ethanol

Structure:-

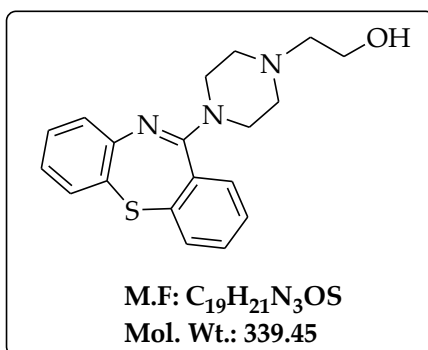


9. Impurity-I

CAS No: - 329218-14-6

Chemical Name: - [2-[4-(dibenzo [b, f] [1, 4] thiazepin-11-yl) piperazin-1-yl] ethanol

Structure:-

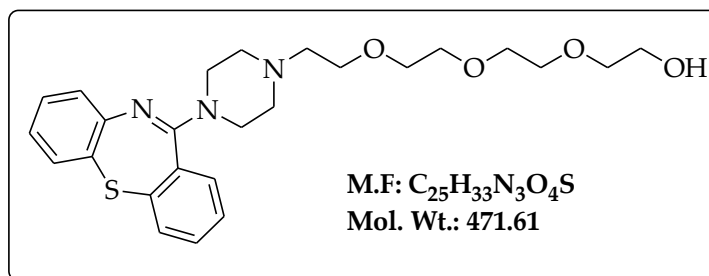


10. Impurity-J

CAS No: - 1356906-17-6

Chemical Name: - 2-[2-[2-[2-[4-(dibenzo [b, f] [1, 4] thiazepin-11-yl) piperazin-1-yl] ethoxy] ethoxy] ethoxy] ethanol

Structure:-

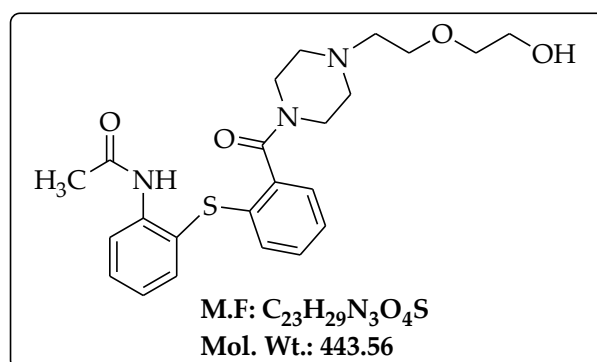


11. Impurity-K

CAS No: - 111974-69-7

Chemical Name: - N-[2-[[2-[[4-[2-(2-hydroxyethoxy)ethyl]piperazin-1-yl] carbonyl] phenyl] sulfanyl] phenyl] acetamide

Structure:-

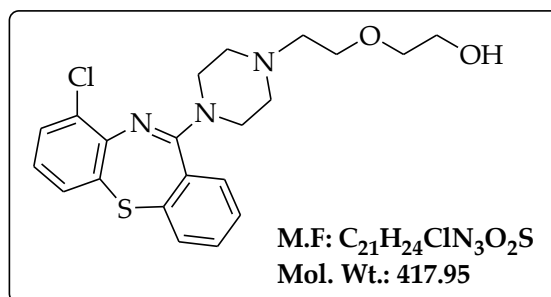


12. Impurity-L

CAS No: -1371638-11-7

Chemical Name: - 2-[2-[4-(9-chlorodibenzo [b, f] [1, 4] thiazepin-11-yl) piperazin-1-yl] ethoxy] ethanol

Structure:-

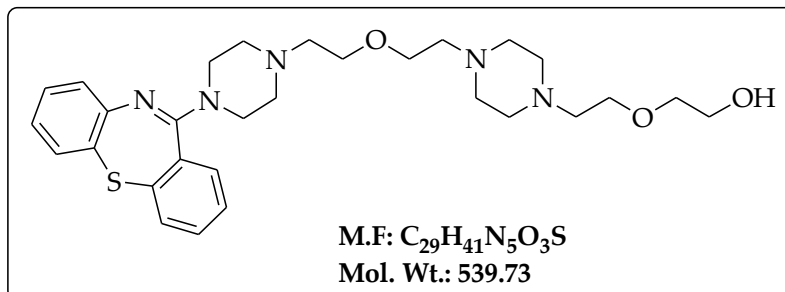


13. Impurity-N

CAS No: -

Chemical Name: - 2-[2-[4-[2-[2-[4-(dibenzo [b, f] [1, 4] thiazepin-11-yl) piperazin-1-yl] ethoxy] ethyl] piperazin-1-yl] ethoxy] ethanol

Structure:-

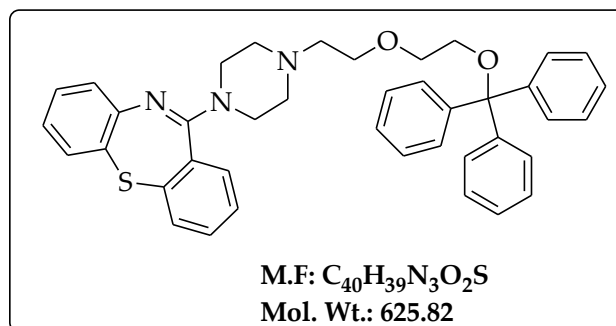


14. **Impurity-O**

CAS No: - 844639-06-1

Chemical Name: - 11-[4-[2-[2-(triphenylmethoxy) ethoxy] ethyl] piperazin-1-yl] dibenzo [b, f][1,4]thiazepine

Structure:-

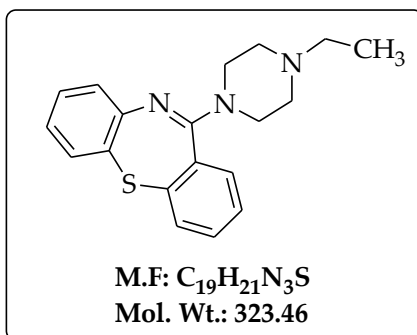


15. **Impurity-P**

CAS No: -1011758-03-4

Chemical Name: - 11-(4-ethylpiperazin-1-yl) dibenzo [b, f] [1, 4] thiazepine

Structure:-

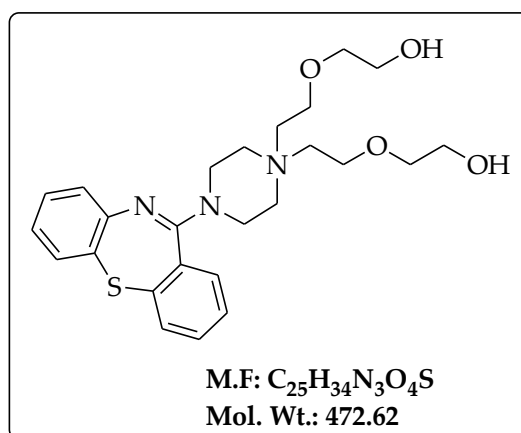


16. Impurity-Q

CAS No: -

Chemical Name: - 4-(dibenzo [b, f] [1, 4] thiazepin-11-yl)-1, 1-bis [2-(2-hydroxyethoxy) ethyl] piperazin-1-ium

Structure:-

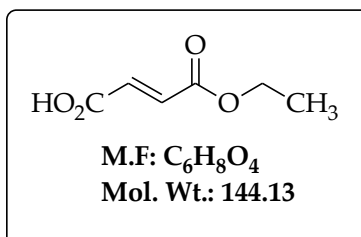


17. Impurity-R

CAS No: - 2459-05-4

Chemical Name: - (2E)-4-ethoxy-4-oxobut-2-enoic acid

Structure:-

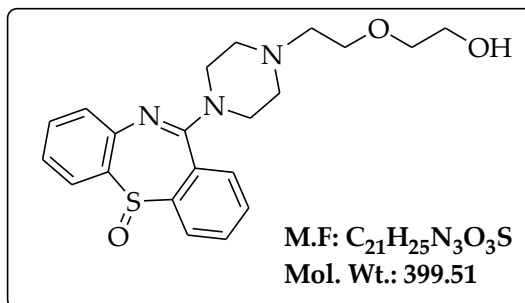


18. Impurity-S

CAS No: - 329216-63-9

Chemical Name: - 2-[2-[4-(5-oxodibenzo[b, f][1,4]thiazepin-11-yl)piperazin-1-yl] ethoxy]
ethanol

Structure:-

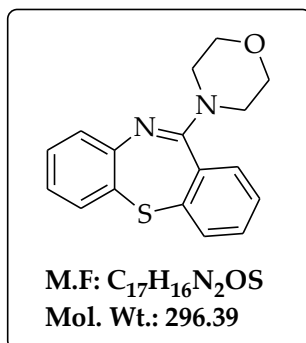


19. Impurity-T

CAS No: - 5747-46-6

Chemical Name:- 11-(morpholin-4-yl) dibenzo [b, f] [1, 4] thiazepine

Structure:-



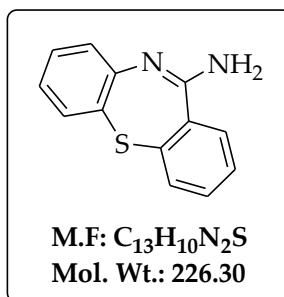
20. Impurity-U

CAS No: - 5786-26-5

Chemical Name: - Dibenzo [b, f] [1, 4] thiazepin-11-amine

Melting point: - 180-181°C

Structure:-

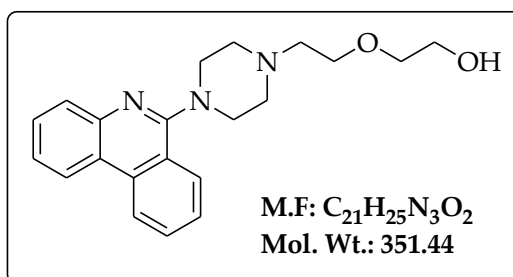


21. Impurity-V

CAS No: -

Chemical Name: - 2-[2-[4-(phenanthridin-6-yl) piperazin-1-yl] ethoxy] ethanol

Structure:-

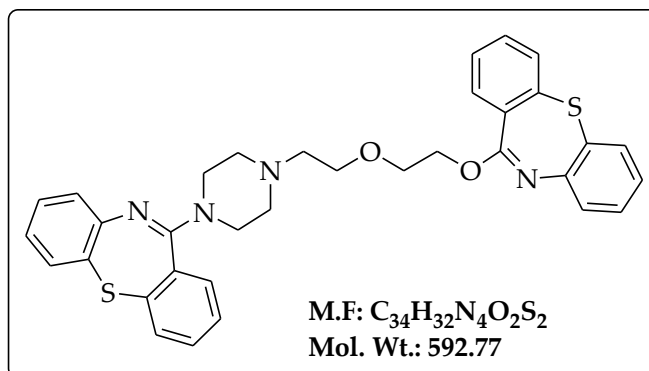


22. Impurity-W

CAS No: -

Chemical Name: - 11-(4-[2-[2-(dibenzo [b, f] [1, 4] thiazepin-11-yloxy) ethoxy] ethyl] piperazin-1-yl] dibenzo [b, f][1,4]thiazepine

Structure:-



Luliconazole impurities:

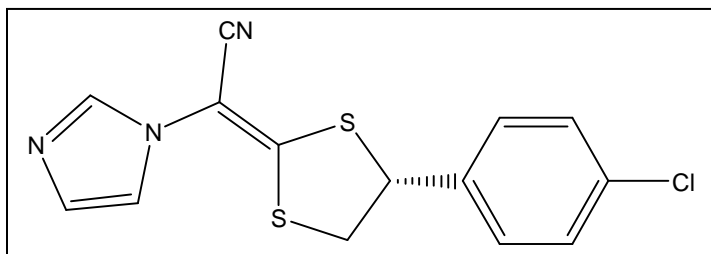
Luliconazole impurity

CAS No: 187164-18-7

Chemical name: (-)-(E)-2-[4(R)-(4-chloro phenyl)-1,3 dithiolan-2-ylidene]-2-(1H-Imidazol-1-yl)acetonitrile

Molecular Formula: C₁₄H₁₀ClN₃S₂

Structure:



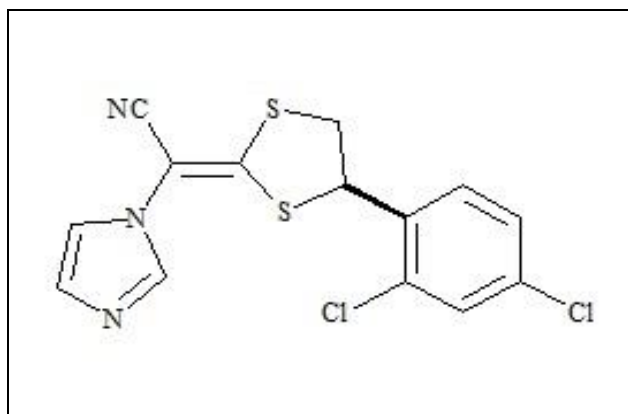
Luliconazole impurity: Luliconazole-Z- isomer

Chemical name: (2Z)-[(4R)-4-(2,4-dichloro phenyl)-1,3 dithiolan-2-ylidene]-2-Imidazole-1-yl acetonitrile

CAS No.: 1240249-76-6

Molecular Formula: C₁₄H₉Cl₂N₃S₂

Structure:

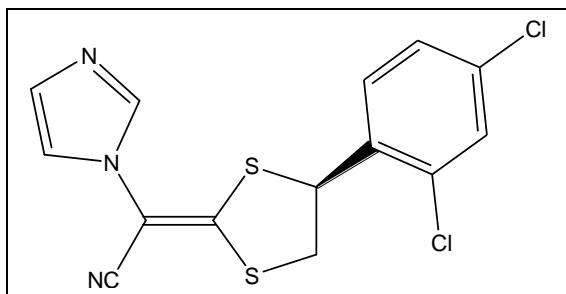


Luliconazole impurity:

CAS No.: NA

Chemical name: (2Z)-[(4S)-4-(2,4 dichloro phenyl)-1,3 dithiolan-2-ylidene]-2-Imidazole-1-yl acetonitrile

Structure:



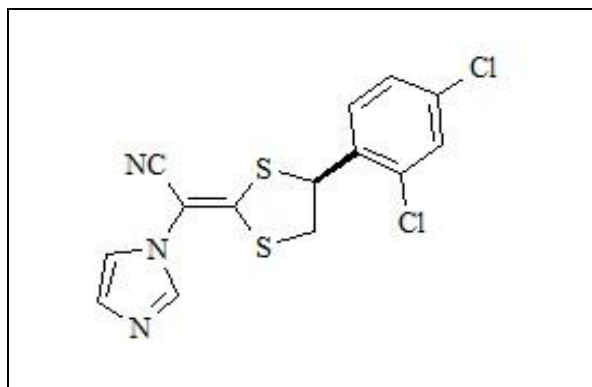
Luliconazole impurity: (S)-Luliconazole-E-isomer

CAS No.: 258424-63-2

Chemical name: (2E)-[(4S)-4-(2,4-di chloro phenyl)-1,3 dithiolan-2-ylidene]-2-Imidazole-1-yl acetonitrile

Molecular Formula: C₁₄H₉Cl₂N₃S₂

Structure:



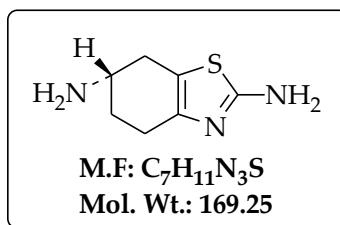
Pramipexole dihydrochloride monohydrate EP Impurities:

Impurity-A:

CAS No: 106092-09-5

Chemical name: (6S)- 4, 5, 6, 7-Tetrahydro-1, 3-benzothiazole-2, 6-diamine

Structure:

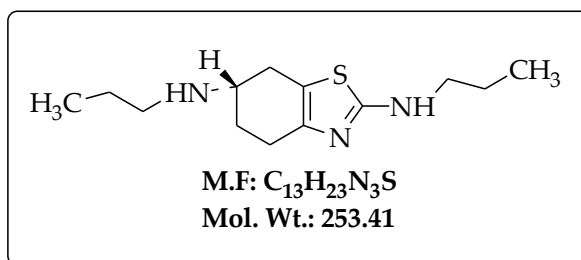


Impurity-B:

CAS No: 1246815-83-7

Chemical name: (6S) - N, N¹-dipropyl-4, 5, 6, 7-Tetrahydro-1, 3-benzothiazole-2, 6-diamine

Structure:

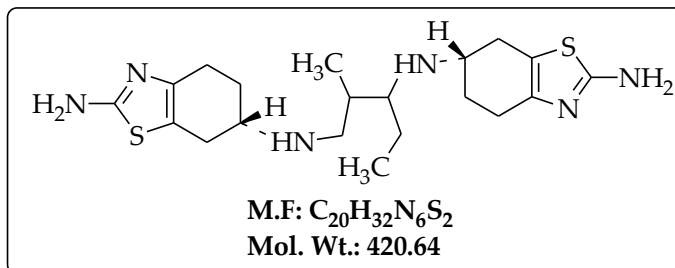


Impurity -C:

CAS No:

Chemical name: Mixture of diastereoisomers of (6S)-6N-[3-((6S)-2-amino-4, 5, 6, 7-tetrahydro-1,3-benzothiazole 6yl) 1ethyl 2-methylpropyl] 4, 5, 6, 7-Tetrahydro-1,3-benzothiazole-2,6 - diamine.

Structure:

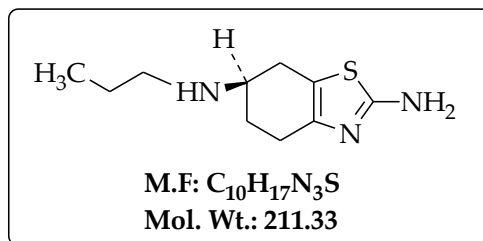


Impurity-D:

CAS No: 104632-26-0

Chemical name: (6R)-6-N-propyl-4, 5, 6, 7-tetrahydro-1, 3-benzothiazole-2, 6-diamine

Structure:



Impurity -E:

CAS No: 106006-84-2

Chemical name: N-[(6S)-2-amino-4,5,6,7-tetrahydro-1,3-benzothiazole-6-yl] propanamide

Structure:

