Claims:

1. The gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5-trifluorophenyl)butan-2-amine including their polymorphs and hydrates.

2. Gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5-trifluorophenyl)butan-2-amine as claimed in claim 1 , which is in crystalline form.

3. Crystalline gentisate salt as claimed in claim 2 which is characterized by PXRD pattern with peaks at about 8.0, 13.73, 16.00, 18.66, 22.61 , 25.62 and 26.48 ^{0} ± 0.2° two-theta (2θ).

4. Gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5-trifluorophenyl)butan-2-amine as claimed in claim 3, further characterized by a PXRD pattern substantially as depicted in Figure 1 .

5. A process for preparing the gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5-trifluorophenyl)butan-2-amine as claimed in claim 1 comprising

(a) dissolving (2R)-4-oxo-4-[3-(trifliioromethyl)-5,6-dihydro[1.2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5-trifluorophenyl)butan-2-amine in a suitable solvent;

(b) thereafter addition of gentisic acid and reacting under suitable conditions;

(c) removing the solvent under suitable conditions to obtain (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1 -(2,4,5-trifluorophenyl)butan-2-amine gentisate.

6. The process as claimed in claim 5, wherein the suitable solvent used is selected from alcohols, water or suitable mixture thereof.

7. A process for preparing the crystalline form of gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5-trifluorophenyl)butan-2-amine as claimed in claims 2-4 comprising

(a) crystallization of (2R) 4-oxo-4-[3-(trifluoromethyl)-5,6-dih.ydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5- trifluorophenyl)butan-2-amine gentisate salt in the presence of suitable solvent and optionally further adding suitable anti solvents and

(b) removing the solvent under suitable conditions to obtain the crystalline form of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-l-(2,4,5-trifluorophenyl)butan-2-amine gentisate.

8. The process as claimed in claim 7, wherein the suitable solvent used is selected from hydrocarbons and mixture of alcohols and hydrocarbons.

9. Amorphous gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l, 2, 4]triazolo[4,3-a]pyrazin-7(8H)-yl]-l -(2,4,5-trifluorophenyl)butan-2- amine.

10. The amorphous form of gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l, 2, 4]triazolo[4, 3-a]pyrazin-7(8H)-yl]-l-(2,4,5-trifluorophenyl)butan-2-amine as claimed in claim 9, characterized by a PXRD pattern as depicted in Figure 2.

11. A process for preparing the amorphous form of gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- l -(2,4,5-trifluorophenyl)butan-2-amine as claimed in claims 9- 10 comprising

(a) dissolving or slurring of · (2R) 4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- l -(2,4,5- trifluorophenyl)butan-2-amine gentisate salt in the presence of suitable solvent and optionally further adding suitable anti solvents and

(b) removing the solvent under suitable conditions to obtain amorphous (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)- yl]-1-(2,4, 5-trifluoropheny|)butan-2-amine gentisate

12. The process as claimed in claim 11, wherein the suitable solvent used is selected from suitable alcohol, water, mixture of alcohol and water; mixture of alcohol and ether, mixture of alcohol and halogenated hydrocarbon and mixture of alcohol and nitrile.

Claims:

1. The gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5-trifluorophenyl)butan-2-amine including their polymorphs and hydrates.

2. Gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5-trifluorophenyl)butan-2-amine as claimed in claim 1 , which is in crystalline form.

3. Crystalline gentisate salt as claimed in claim 2 which is characterized by PXRD pattern with peaks at about 8.0, 13.73, 16.00, 18.66, 22.61 , 25.62 and 26.48 $^0 \pm 0.2°$ two-theta (2θ).

4. Gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5-trifluorophenyl)butan-2-amine as claimed in claim 3, further characterized by a PXRD pattern substantially as depicted in Figure 1 .

5. A process for preparing the gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5-trifluorophenyl)butan-2-amine as claimed in claim 1 comprising

(a) dissolving (2R)-4-oxo-4-[3-(trifliioromethyl)-5,6-dihydro[1.2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5-trifluorophenyl)butan-2-amine in a suitable solvent;

(b) thereafter addition of gentisic acid and reacting under suitable conditions;

(c) removing the solvent under suitable conditions to obtain (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-l -(2,4,5-trifluorophenyl)butan-2-amine gentisate.

6. The process as claimed in claim 5, wherein the suitable solvent used is selected from alcohols, water or suitable mixture thereof.

7. A process for preparing the crystalline form of gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5-trifluorophenyl)butan-2-amine as claimed in claims 2-4 comprising

(a) crystallization of (2R) 4-oxo-4-[3-(trifluoromethyl)-5,6-dih.ydro[1 ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- 1 -(2,4,5- trifluorophenyl)butan-2-amine gentisate salt in the presence of suitable solvent and optionally further adding suitable anti solvents and

(b) removing the solvent under suitable conditions to obtain the crystalline form of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-l-(2,4,5-trifluorophenyl)butan-2-amine gentisate.

8. The process as claimed in claim 7, wherein the suitable solvent used is selected from hydrocarbons and mixture of alcohols and hydrocarbons.

9. Amorphous gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l, 2, 4]triazolo[4,3-a]pyrazin-7(8H)-yl]-l -(2,4,5-trifluorophenyl)butan-2- amine.

10. The amorphous form of gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l, 2, 4]triazolo[4, 3-a]pyrazin-7(8H)-yl]-l-(2,4,5-trifluorophenyl)butan-2-amine as claimed in claim 9, characterized by a PXRD pattern as depicted in Figure 2.

11. A process for preparing the amorphous form of gentisate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- l -(2,4,5-trifluorophenyl)butan-2-amine as claimed in claims 9- 10 comprising

(a) dissolving or slurring of · (2R) 4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- l -(2,4,5- trifluorophenyl)butan-2-amine gentisate salt in the presence of suitable solvent and optionally further adding suitable anti solvents and

(b) removing the solvent under suitable conditions to obtain amorphous (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)- yl]-1-(2,4, 5-trifluoropheny|)butan-2-amine gentisate

12. The process as claimed in claim 11, wherein the suitable solvent used is selected from suitable alcohol, water, mixture of alcohol and water; mixture of alcohol and ether, mixture of alcohol and halogenated hydrocarbon and mixture of alcohol and nitrile.

~~13. The adipate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-l-(2,4,5-trifluorophenyl)butan-2- amine including their polymorphs and hydrates.~~

~~14. Adipate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-l-(2,4,5-trifluorophenyl)butan-2-amine as claimed in claim 13, which is characterized by PXRD pattern with peaks at about 8.05, 17.64, 18.29, 21.65, 23.38, 23.85 and 24.38 $^{\theta}$ ± 0.2° two-theta. (2θ).~~

15. Adipate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine as claimed in claims 13-14, further characterized by a PXRD pattern substantially as depicted in Figure 3.

16. A process for preparing the adipate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine as claimed in claims 13-15 comprising

(a) dissolving of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine in a suitable solvent;

(b) thereafter addition of adipic acid and reacting under suitable conditions and;

(c) removing the solvent under suitable conditions to obtain (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine adipate.

17. The process as claimed in claim 16, wherein the suitable solvent used is selected from alcohols, water or suitable mixture thereof.

18. The trifluoroacetic acid salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine including their polymorphs and hydrates.

19. Trifluoroacetic acid salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine as claimed in claim 1-8, which is characterized by PXRD pattern with peaks at about 6.64, 9.39, 10.99, 13.40, 15.32, 17.15, 19.20, 19.66, 21.48, 22.46, 24.68, 26.89, 27.86, 29.34, 31.24, 32.77 and 34.82 ± 0.2° two-theta (2θ).

20. Trifluoro-aceticacid salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine as claimed in claim-18, further characterized by a PXRD pattern substantially as depicted in Figure 6.

21. A process for preparing the trifluoro-aceticacid salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydiO[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine as claimed in claim 1-8 comprising

(a) dissolving of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine or its salts with first acid in a suitable solvent;

~~(b) thereafter addition of trifluoroacetic acid and reacting under suitable conditions;~~

~~(c) removing the solvent under suitable conditions to obtain (2R)-4-oxo-4-[3-(trifluoromethy l)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- l -(2,4,5-trifluorophenyl)butan-2-amine trifluoroacetic acid salt.~~

~~22. The process as claimed in claim 21 , wherein the suitable solvent used is selected from alcohols or suitable mixture thereof.~~

~~23. The process as claimed in claim 21 , wherein the suitable salt of first acid is selected from HCl, acetic acid.~~

~~24. A process for preparing the crystalline form trifluoro acetic acid salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- l -(2,4,5-trifluorophenyl)butan-2-amine as claimed in claims 19-20 comprising~~

~~(a) crystallization of (2R)-4-oxo-4-[3-(trifluoromethyl)-5, 6- dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl] l-(2,4,5-trifluorophenyl)butan-2- amine trifluoro aceticacid salt, in the presence of suitable solvent and optionally further adding suitable anti-solvents and~~

~~(b) removing the solvent under suitable conditions to obtain crystalline (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl] l-(2,4,5-trifluorophenyl)butan-2-amine trifluoroacetic acid salt.~~

~~25. The process as claimed in claim 24, wherein the suitable solvent used is selected from alcohols, esters and ethers or suitable mixture thereof.~~

~~26. The crystalline form of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l, 2, 4]triazolo[4, 3-a]pyrazin-7(8H)-yl] l-(2,4,5-trifluorophenyl)butan-2- amine hydrochloride.~~

~~27. The crystalline (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]- l -(2,4,5-trifluorophenyl)butan-2-amine hydrochloride as claimed in claim 26 having characteristic powder X-ray diffraction pattern having peaks expressed as 2θ at about 6.50, 8.05, 13.79, 18.05, 19.52, 22.65, 23.40, 25.39 and 27.09 ± 0.2 degree two theta.~~

~~28. The crystalline form of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l, 2, 4]triazolo[4, 3-a]pyrazin-7(8H)-yl] l-(2, 4, 5-trifluorophenyl)butan-2- amine hydrochloride as claimed in claim 26, further characterized by a PXRD pattern as depicted in Figure 4.~~

29. A process for preparing the crystalline form of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-tri.fluorophenyl)butan-2-amine hydrochloride as claimed in claim 26 comprising

(a) reaction of the free base (formula I) under suitable reaction conditions with the hydrochloric acid in suitable solvent;

(b) suitably removing the solvent to obtain the crystalline form of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine hydrochloride.

30. The process as claimed in claim 29, wherein the suitable solvent used is selected from alcohols, ethers and water or suitable mixtures thereof.

31. The crystalline form (I) of (2R)-4-oxo-4-[3-(trifluoromethyI)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate.

32. The crystalline (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate (1) as claimed in claim 3-1 having characteristic powder X-ray diffraction pattern having peaks expressed as 2θ at about 6.81, 18.31, 22.99, 23.70 and 25.75 ± 0.2 degree two-theta.

33. The crystalline form of (2R)-4-oxo-4-[3-(trifluorornethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate as claimed in claim 31, characterized by a PXRD pattern as depicted in Figure 5.

34. A process for preparing the crystalline form (I) of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate as claimed in claim 31 comprising

(a) reaction of the free base (formula I) under suitable reaction conditions with the benzenesulfonic acid in suitable solvent;

(b) suitably removing the solvent to obtain the crystalline form of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate.

35. The process as claimed in claim 34, wherein the suitable solvent used is selected from esters and hydrocarbons or suitable mixture of thereof.

36. The crystalline form II of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate.

37. The crystalline form II of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate as claimed in claim 36 having characteristic powder X-ray diffraction pattern having peaks expressed as 2θ at about 5.69, 7.45, 10.08, 11.41, 13.09, 18.34, 22.52 and 22.97 ± 0.2 degree two-theta.

38. The crystalline form II of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate as claimed in claim 36, characterized by a PXRD pattern as depicted in Figure 7.

39. A process for preparing the crystalline form II of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate as claimed in claim 36 comprising

(a) reaction of the free base (formula I) under suitable reaction conditions with the benzenesulfonic acid in suitable solvent;

(b) suitably removing the solvent to obtain the crystalline form II of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate.

40. The process as claimed in claim 39, wherein the suitable solvent used is selected from a mixture of esters and water, mixture of esters, ethers and water, mixture of esters, alcohols and water, mixture of ester, hydrocarbons and water, mixture of esters, ketones and water.

41. Amorphous (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate.

42. The amorphous form of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate as claimed in claim 41, further characterized by a PXRD pattern as depicted in Figure 8.

43. A process for preparing amorphous (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine besylate as claimed in claim 41 comprising

~~(a) dissolving or slurring of (2R) 4-oxo-4-[3-(trifluoromethyl)-5,6- dihydro[l, 2, 4]triazolo[4, 3-a]pyrazin-7(8H)-yl]-l-(2, 4, 5-trifluorophenyl)butan-2-amine besylate salt in the presence of suitable solvent and optionally further adding suitable anti solvents~~

~~(b) removing the solvent under suitable conditions to obtain amorphous (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[l ,2,4]triazolo[4,3- a]pyrazin-7(8H)-yl]-l-(2, 4, 5-trifluorophenyl)butan-2-amiiie besylate~~

~~44. The process as claimed in claim 43, wherein the suitable solvent used is selected from alcohols, halogenated hydrocarbons and water or suitable mixtures thereof.~~