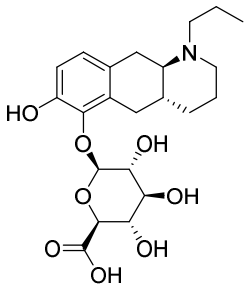
CLAIMS

1. A solid form of the compound of formula (Id)



(Id)

wherein said solid form is selected from the group consisting of:

the dihydrate (DH1) characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks at the following 2θ -angles ± 0.2° 2θ: 10.4, 11.6, 12.3, 13.1, 13.6, 14.3, 15.6, 16.0, 16.8, 18.5°;

the anhydrate (AH1) characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks at the following 2θ -angles ± 0.2° 2θ: 8.5, 11.1, 12.4, 12.9, 15.6, 16.7, 18.9, 19.3, 20.0, 21.2°;

the heptahydrate (HH) characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks at the following 2θ -angles ± 0.2° 2θ: 7.0, 8.6, 10.2, 11.1, 11.9, 13.4, 14.0, 14.5, 17.0, 17.4°;

the Form A characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks at the following 2θ -angles ± 0.2° 2θ: 7.6, 9.5, 10.0, 11.2, 12.0, 14.3, 14.6, 15.3, 15.5, 19.3°;

the Form B characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks at the following 2θ -angles ± 0.2° 2θ: 7.6, 9.0, 10.9, 12.3, 14.3, 15.0, 21.5, 22.1, 22.6, 23.7°;

the Form C characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks at the following 2θ -angles ± 0.2° 2θ: 7.5, 8.1, 10.3, 12.6, 13.5, 13.8, 14.9, 17.5, 18.5, 20.6°;

the Monohydrate (MH1) characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks at

the following 2θ -angles ± 0.2° 2θ: 9.2, 10.2, 11.8, 12.6, 13.6, 15.7, 16.0, 16.5, 17.5, 18.1°;

the potassium salt (K^+ salt) characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks at the following 2θ -angles ± 0.2° 2θ: 3.0, 9.0, 12.6, 13.6, 15.0, 17.1, 18.0, 18.4, 18.8, 19.4°;

the sodium salt (Na^+ salt) form 1 characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks at the following 2θ -angles ± 0.2° 2θ: 5.9, 8.9, 11.9, 12.8, 13.8, 14.9, 17.7, 18.6, 19.0 and 19.5°;

the Na^+ salt form 2 characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks at the following 2θ -angles ± 0.2° 2θ: 5.6, 8.5, 12.6, 13.6, 14.1, 15.0, 16.7, 17.0, 18.8 and 19.8°;

the hydrochloride salt (HCl salt) characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks at the following 2θ -angles ± 0.2° 2θ: 5.7, 7.3, 10.6, 13.3, 15.3, 15.4, 16.2, 20.1, 22.5, 23.0°;

and hydrobromide salt (HBr salt) characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks at the following 2θ -angles ± 0.2° 2θ: 12.5, 13.9, 14.5, 15.6, 18.6, 18.9, 19.8, 21.3, 22.0, 22.4°~~:~~

~~a) a form of the zwitterion of compound (Id);~~

~~b) an alkali metal salt of the compound of formula (Id); and~~

~~c) a halogen salt of the compound of formula (Id)~~.

~~2. The solid form according to claim 1, wherein said solid form is a crystalline form.~~

~~3.~~2. The solid form according to ~~any one of~~ claim~~s~~ 1 ~~and 2~~, wherein said solid form is selected from the group consisting of the dihydrate of ~~the zwitterion of~~ compound (Id), the heptahydrate of ~~the zwitterion of~~ compound (Id) and the potassium salt of the compound (Id).

~~4.~~3. The solid form according to any one of claims 1-2~~3~~, wherein said solid form is the dihydrate ~~of the zwitterion of compound (Id)~~ or the potassium salt of the compound (Id).

~~5. The solid form according to any one of claims 1-4, wherein said solid form is the dihydrate characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks as listed for the dihydrate in Table 2, group (a).~~

~~6.~~4. The solid form according to any one of claims 1-~~5~~3, wherein said solid form is the dihydrate characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising peaks at the following 2θ-angles ± 0.2° 2θ :10.4, 11.6, 12.3 and 13.1 and 13.6°.

~~7.~~5. The solid form according to ~~any one of~~ claim~~s~~ 4~~6~~, wherein said x-ray powder diffraction pattern further comprises one or more peaks selected from the group consisting of peaks at the following 2θ-angles ± 0.2° 2θ: 14.3, 15.6, 16.0, 16.8 and 18.5°.

6. The solid form according to any one of claims 1-5, wherein said solid form is a crystal form characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising peaks at the following 2θ -angles ± 0.2° 2θ: 10.4, 11.6, 12.3, 13.1, 13.6, 14.3, 15.6, 16.0, 16.8 and 18.5°.

7. The solid form according to any one of claims 1-6, wherein said solid form is a crystal form characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising peaks at the following 2θ -angles± 0.2° 2θ: 12.3, 13.1, 13.6, 16.0, 16.8, 18.5, 18.9, 19.4, 20.5, 21.4, 23.5, 24.7, 25.4, 26.9 and 28.7°.

8. The solid form according to any one of claims 1~~2~~-7, wherein said solid form is a crystal form characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) essentially as depicted in Figure 8a.

9. The solid form according to any one of claims 1-8, said solid form exhibiting a weight loss of ~~about~~ 7.6% w/w compared to the initial weight when heated from ~~about~~ 30°C to ~~about~~ 150°C (heating rate 10°C/min), such as measured using thermogravimetric analysis.

~~10. The solid form according to any one of claims 1-2, wherein said solid form is the potassium salt characterized by an x-ray powder diffraction pattern as obtained using~~

~~CuKα1 radiation (λ=1.5406 Å) comprising one or more XRPD peaks as listed for the potassium salt in Table 2, group (a).~~

~~11.~~10. The solid form according to claim ~~10~~11, wherein said potassium salt has a crystal form characterized by an XRPD obtained using CuKα1 radiation (λ=1.5406 Å) comprising peaks at the following 2θ-angles ± 0.2° 2θ: 3.0, 9.0, 12.6, 13.6, and 15.0°.

~~12.~~11. The solid form according to claim ~~11~~10, wherein said x-ray powder diffraction pattern further comprises one or more peaks selected from the group consisting of peaks at the following 2θ-angles ± 0.2° 2θ: 17.1, 18.0, 18.4, 18.8 and 19.4°.

12. The solid form according to any one of claims 1-3 and 10-11, wherein said potassium salt has a crystal form characterized by an XRPD obtained using CuKα1 radiation (λ=1.5406 Å) comprising peaks at the following 2θ-angles ± 0.2° 2θ: 3.0, 9.0, 12.6, 13.6, 15.0, 17.1, 18.0, 18.4, 18.8 and 19.4°.

13. The solid form according to claims 1-3, and 10-12, wherein said solid form has a crystal form characterized by an XRPD obtained using CuKα1 radiation (λ=1.5406 Å) comprising peaks at the following 2θ-angles ± 0.2° 2θ: 3.0, 9.0, 12.6, 13.6, 15.0, 18.0, 19.4, 21.8, 24.7, 27.1, 29.8, 33.3, 35.6, 38.6 and 39.6°.

~~13.~~14. The solid form according to any one of claims 1-3 and ~~11~~10-~~12~~13, said form exhibiting a weight loss of less than ~~about~~ 1% w/w compared to the initial weight when heated from ~~about~~ 20°C to ~~about~~ 150°C (heating rate 10°C/min), such as measured using thermogravimetric analysis.

15. The solid form according to claims 1-2, wherein said solid form is a crystal form characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising peaks at the following 2θ-angles ± 0.2° 2θ: 7.0, 8.6, 10.2, 11.1 and 11.9°.

16. The solid form according to any one of claims 1-2, and claim 15, wherein said x-ray powder diffraction pattern further comprises one or more peaks selected from the group consisting of peaks at the following 2θ-angles ± 0.2° 2θ: 13.4, 14.0, 14.5, 17.0 and 17.4°.

17. The solid form according to any one of claims 1-2, and claims 15-16, wherein said solid form is a crystal form characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising peaks at the following 2θ-angles ± 0.2° 2θ: 7.0, 8.6, 10.2, 11.1, 11.9, 13.4, 14.0, 14.5, 17.0 and 17.4°.

18. The solid form according to any one of claims 1-2, and claims 15-17, wherein said solid form is a crystal form characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) comprising peaks at the following 2θ-angles ± 0.2° 2θ: 7.0, 8.6, 10.2, 11.1, 11.9, 14.0, 17.0, 22.2, 25.9, 27.3, 28.3, 30.8, 34.0, 34.8 and 35.2°.

19. The solid form according to any one of claims 1-2, and claims 15-18, wherein said solid form is a crystal form characterized by an x-ray powder diffraction pattern as obtained using CuKα1 radiation (λ=1.5406 Å) essentially as depicted in Figure 10a.

20. The solid form according to any one of claims 1-2, and claims 15-19, exhibiting a weight loss of 21% w/w compared to the initial weight when heated from 20°C to 150°C (heating rate 10°C/min), such as measured using thermogravimetric analysis.

~~14.~~21. The solid form of the compound of formula (Id) according to any of claims 1-~~13~~20, for use as a medicament.

~~15.~~22. A pharmaceutical composition comprising a therapeutically effective amount of the solid form of the compound of formula (Id) according to any one of claims 1-~~13~~20, and one or more pharmaceutically acceptable excipients.

~~16.~~23. A solid form of the compound of formula (Id) according to any one of claims 1-20~~13~~, for use in the treatment of a neurodegenerative disease or disorder such as Parkinson's Disease, Huntington's disease, Restless leg syndrome or Alzheimer's disease; or a neuropsychiatric disease or disorder such as schizophrenia, attention deficit hyperactivity disorder or drug addiction.

~~17.~~24. Use of solid form of the compound of formula (Id) according to any one of claims 1-~~13~~20, in the manufacture of a medicament for the treatment of a neurodegenerative disease or disorder such as Parkinson's Disease, Huntington's disease, Restless leg

syndrome or Alzheimer’s disease; or for the treatment of a neuropsychiatric disease or disorder such as schizophrenia, attention deficit hyperactivity disorder or drug addiction.