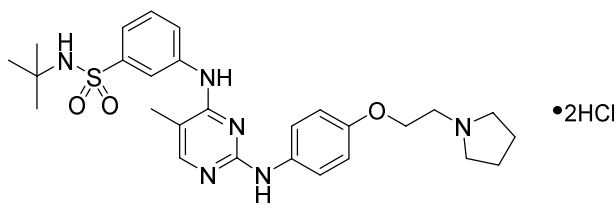


CLAIMS

1. A crystalline form of Compound 1:



wherein the crystalline form is a monohydrate that is characterized by the following peaks in its X-ray powder diffraction pattern: 4.3, 9.6, 10.0, 12.4, 12.7, and 17.0 ± 0.2 degrees 2θ ;

or

wherein the crystalline form is a monohydrate that is characterized by the following peaks in its X-ray powder diffraction pattern:

Position ° $2\theta \pm 0.2$ degrees	d-spacing [Å]	Height [cts]		Position ° $2\theta \pm 0.2$ degrees	d-spacing [Å]	Height [cts]
4.3	20.776	681		23.6	3.765	2011
9.6	9.220	1040		24.1	3.695	7573
10.0	8.883	692		24.9	3.579	1015
12.4	7.163	825		25.3	3.520	2108
12.7	6.944	1182		25.6	3.484	962
13.5	6.567	2426		26.1	3.410	612
14.2	6.226	1568		26.9	3.317	1246
15.0	5.910	1612		27.2	3.282	1490
16.0	5.531	2875		27.7	3.215	2008
17.0	5.227	7509		30.0	2.979	962
17.6	5.051	2863		30.5	2.934	727
18.0	4.915	5744		31.0	2.888	431
18.6	4.776	1002		31.9	2.803	508
18.9	4.684	472		34.3	2.615	915
21.0	4.229	1594		35.1	2.557	556
21.7	4.089	3006		36.3	2.475	517

22.7	3.912	398				
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2. A sample comprising the crystalline form of claim 1, wherein the sample comprises at least about 90% by weight of Compound 1.
3. The sample of claim 2, wherein the sample comprises at least about 95% by weight of Compound 1.
4. The sample of claim 2, wherein the sample comprises at least about 99% by weight of Compound 1.
5. The sample of claim 2, wherein the sample comprises no more than about 5.0 percent of total organic impurities.
6. The sample of claim 2, wherein the sample comprises no more than about 3.0 percent of total organic impurities.
7. The sample of claim 2, wherein the sample comprises no more than about 1.5 percent of total organic impurities.
8. The sample of claim 2, wherein the sample comprises no more than about 1.0 percent of total organic impurities.
9. The sample of claim 2, wherein the sample comprises no more than about 0.5 percent of total organic impurities.
10. A method of inhibiting activity of a JAK2 kinase, or a mutant thereof, in a biological sample comprising the step of contacting said biological sample with a crystalline form of claim 1, or a composition thereof.
11. Use of a crystalline form of claim 1, or a composition thereof in the manufacture of a medicament for inhibiting activity of a JAK2 kinase, or a mutant thereof, in a patient, wherein the crystalline form or a composition thereof is to be administered to said patient, and wherein the patient is suffering from a myeloproliferative disorder; preferably wherein the myeloproliferative

disorder is selected from primary myelofibrosis, polycythemia vera, and essential thrombocythemia.

12. Use of a crystalline form of claim 1, or pharmaceutically acceptable composition thereof in the manufacture of a medicament for treating a JAK2-mediated disease or disorder, in a patient in need thereof, wherein the crystalline form or a composition thereof is to be administered to the patient, and wherein the patient is suffering from a myeloproliferative disorder; preferably wherein the myeloproliferative disorder is selected from primary myelofibrosis, polycythemia vera, and essential thrombocythemia.

13. A crystalline form of claim 1, or a composition thereof for use in therapy.