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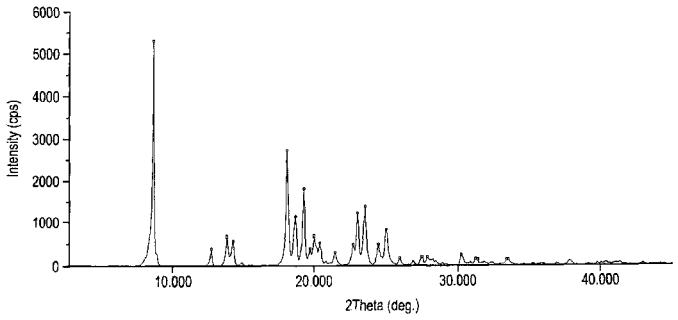
(54) Title: PROCESS FOR PREPARATION OF HYDRATES OF OLANZAPINE AND THEIR CONVERSION INTO CRYSTALLINE FORMS OF OLANZAPINE



Peak No.	2Theta	FWHM	d-value	Intensity	I/Io
1	8.820	0.118	10.0176	5301	100
2	12.820	0.141	6.8995	385	7
3	13.920	0.188	6.3567	654	12
4	14.340	0.212	6.1714	558	11
5	18.180	0.165	4.8756	2721	51
6	18.760	0.235	4.7262	1141	22
7	19.320	0.165	4.5904	1799	34
8	19.740	0.118	4.4937	388	7
9	20.020	0.165	4.4315	663	13
10	20.440	0.188	4.3414	520	10
11	21.440	0.188	4.1411	300	6
12	22.680	0.141	3.9174	478	9
13	22.980	0.188	3.8669	1208	23
14	23.480	0.212	3.7857	1359	26
15	24.380	0.141	3.6480	489	9
16	24.920	0.212	3.5701	799	15
17	25.840	0.212	3.4451	180	3
18	27.420	0.188	3.2500	205	4
19	27.800	0.165	3.2065	200	4
20	30.120	0.141	2.9646	258	5
21	31.120	0.141	2.8715	162	3
22	31.280	0.118	2.8572	147	3
23	33.320	0.141	2.6868	134	3
24	33.480	0.118	2.6743	135	3

(57) Abstract: The present invention relates to a method for the preparation of hydrates of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno [2,3-b] [1,5] benzodiazepine (hereinafter referred to as Olanzapine). The present invention also relates to a process for conversion of these hydrates into a pure crystalline form of olanzapine referred to as form-I. The present invention also relates to a method of converting Olanzapine Form-2 to Form-1.

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