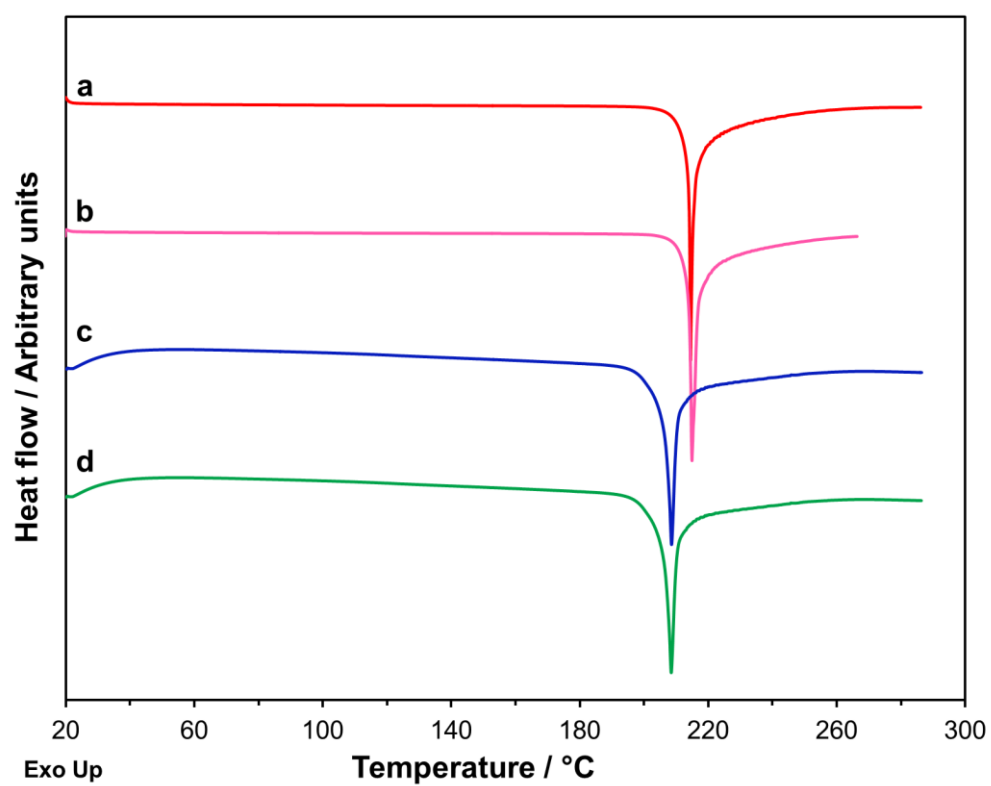
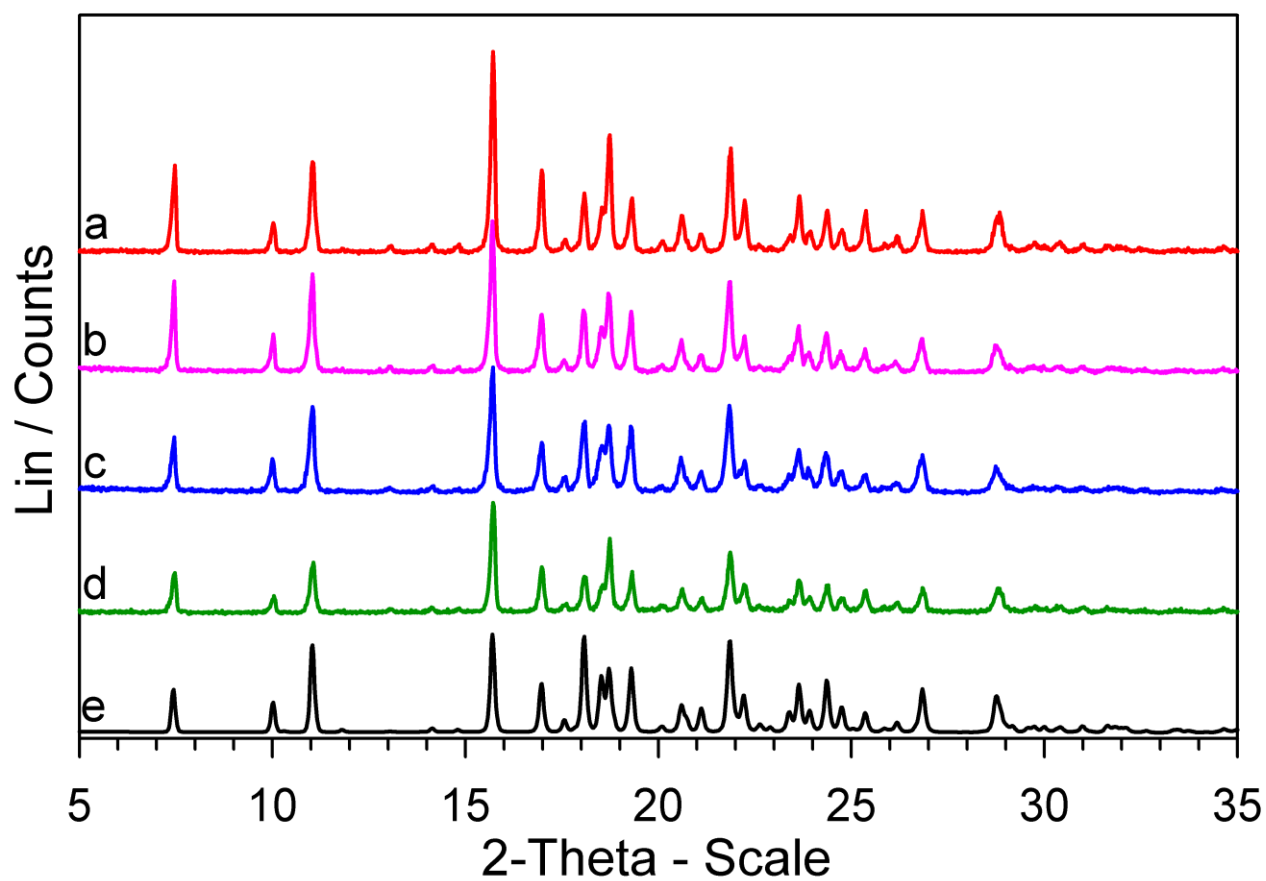


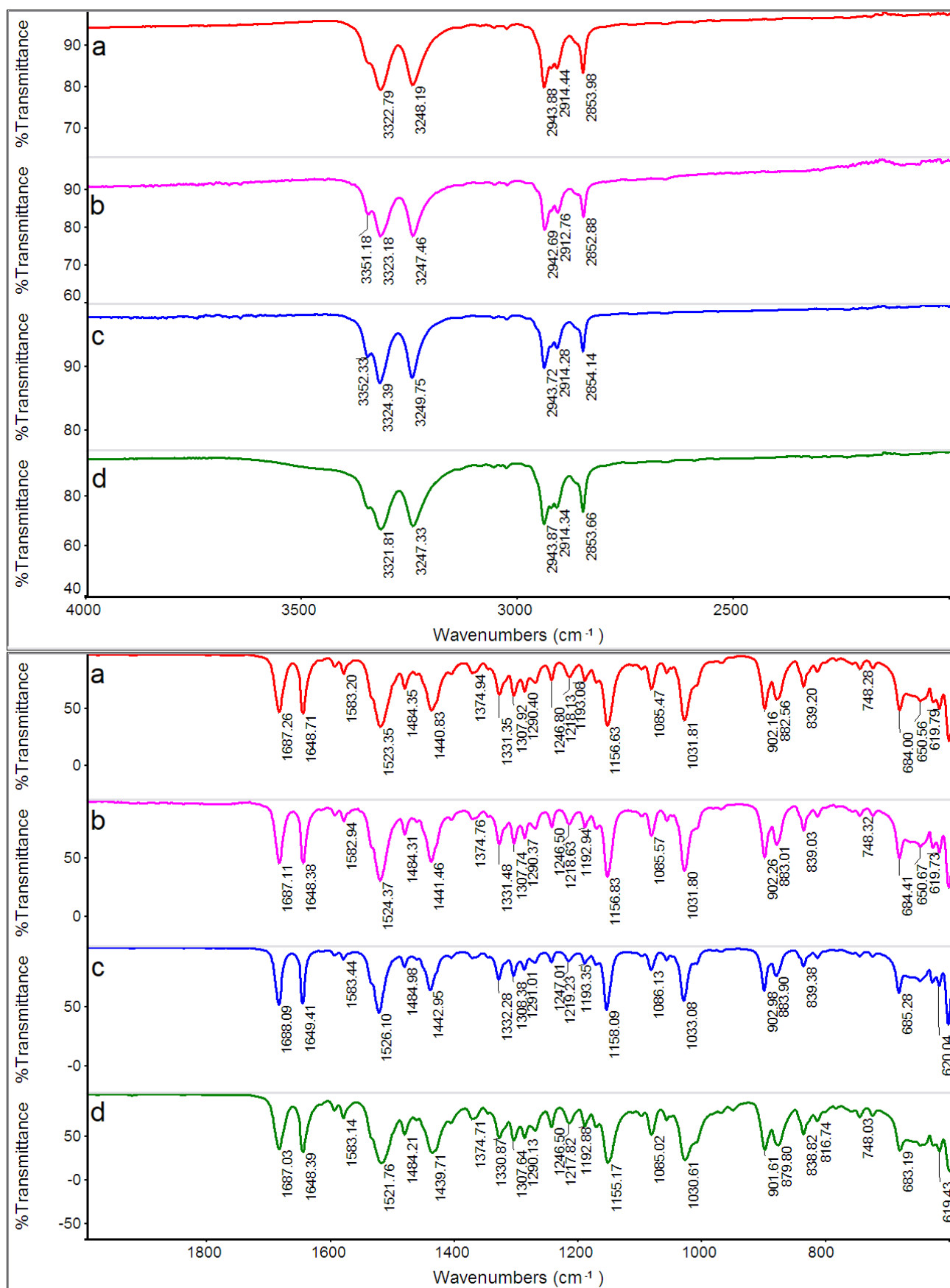
## Supplementary material



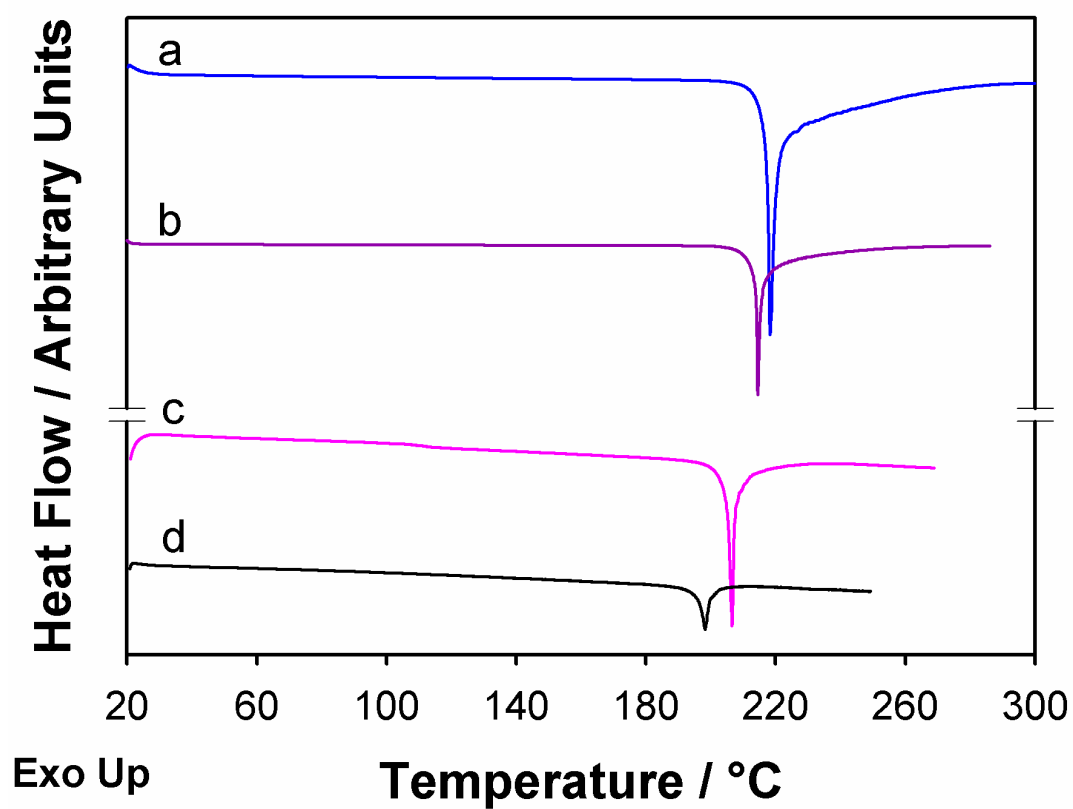
**Fig. S1** DSC traces of a production batch (a), USP H1H396 (b), USP R09020 (c) and *GPZ3h* (d) samples at 10 K·min<sup>-1</sup> heating rate.



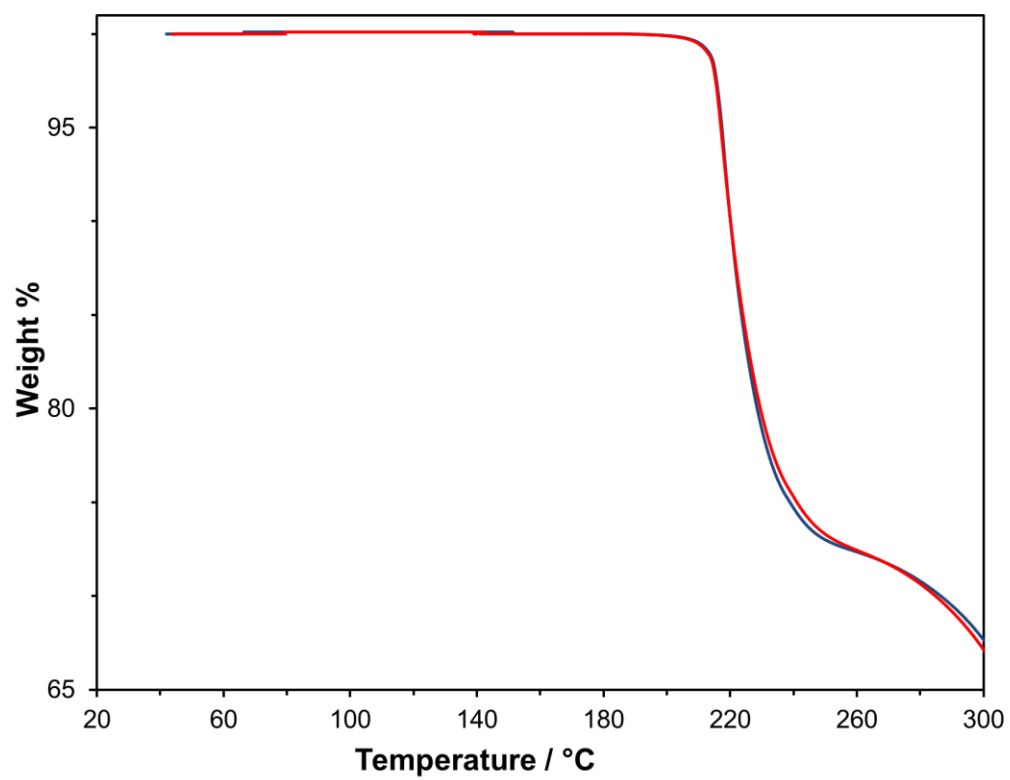
**Fig. S2** XRPD patterns of a glipizide production batch (a), USP H1H396 (b), USP R09020 (c) and *GPZ3h* (d) samples. XRPD simulated pattern of GPZ [13] (e).



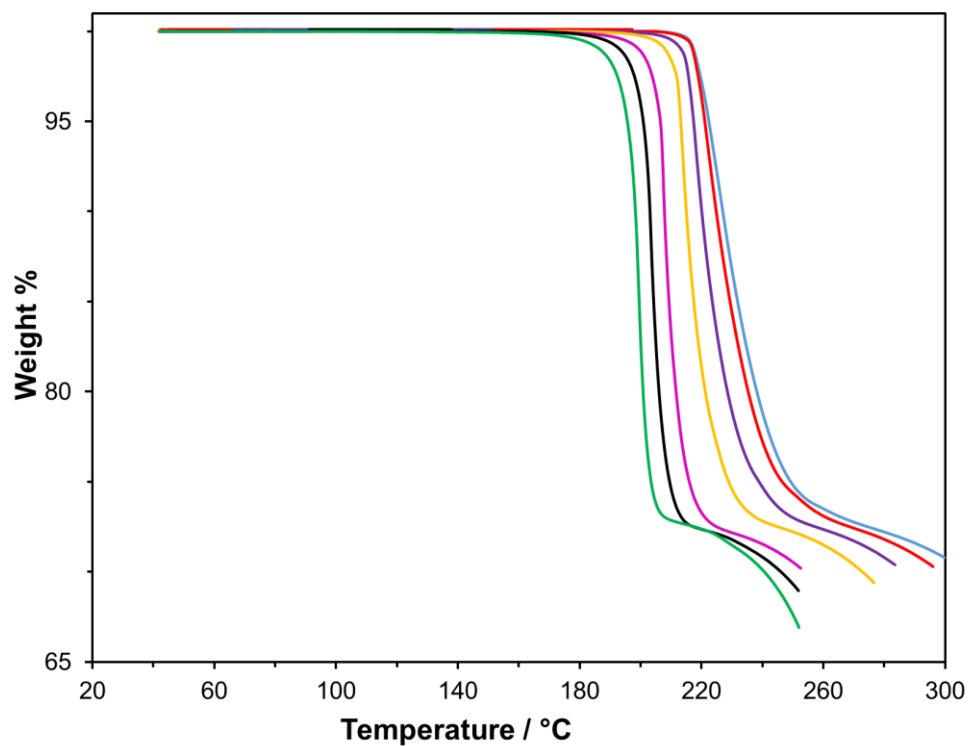
**Fig. S3** FT-IR spectra of a glipizide production batch (a), USP H1H396 (b), USP R09020 (c) and GPZ3h (d) samples.



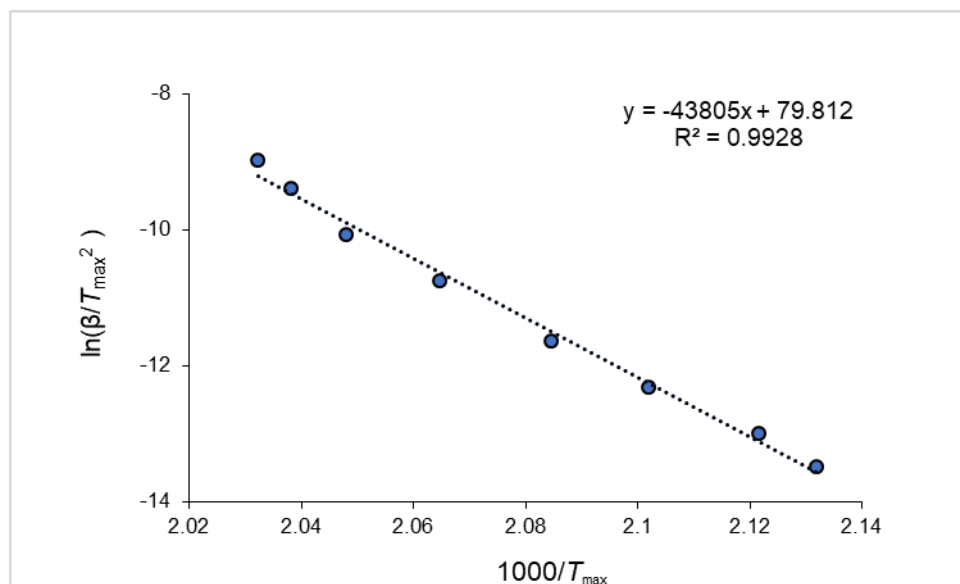
**Fig. S4** DSC curves recorded on a glipizide production batch under nitrogen flow at 30 K·min<sup>-1</sup> (a), 10 K·min<sup>-1</sup> (b), 2 K min<sup>-1</sup> (c) and 0.5 K·min<sup>-1</sup> (d).



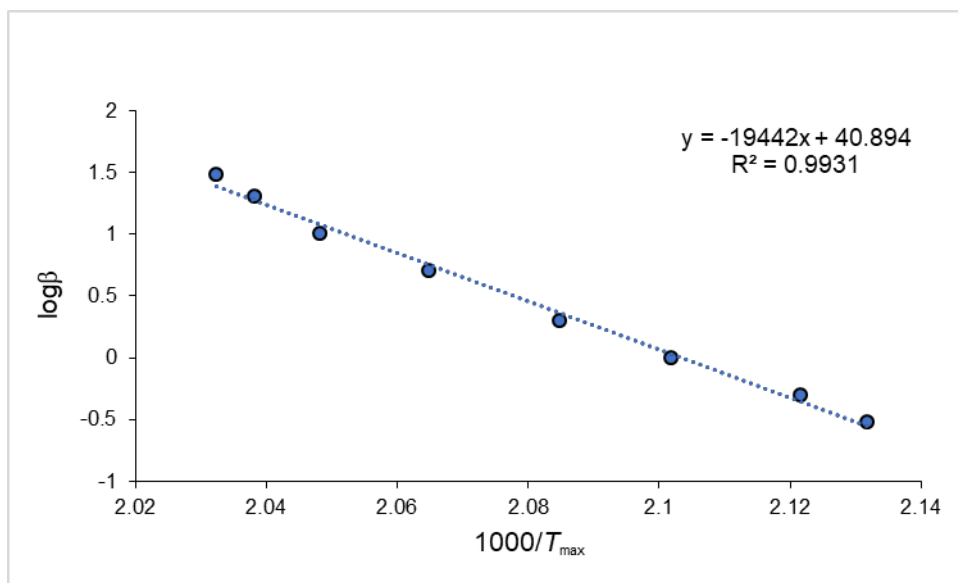
**Fig. S5** TG curves registered on a glipizide production batch at 10 K·min<sup>-1</sup> under nitrogen flow (red) and in air (blue).



**Fig. S6** TG curves registered on a glipizide production batch under nitrogen flow at different heating rates. From right to left: 30 K·min<sup>-1</sup> (blue), 20 K·min<sup>-1</sup> (red), 10 K·min<sup>-1</sup> (violet), 5 K·min<sup>-1</sup> (yellow), 2 K·min<sup>-1</sup> (pink), 1 K·min<sup>-1</sup> (black) and 0.5 K·min<sup>-1</sup> (green).



**Fig. S7** Experimental data points plotted according to the Kissinger method.



**Fig. S8** Experimental data points plotted according to the Ozawa-Flynn-Wall method and their linear regression.

**Table S1** Data used to determine the Kissinger equation.

$\beta$ , K·min <sup>-1</sup>	$T_{\max}$ , K	$1/T_{\max}$	$\ln(\beta/T_{\max}^2)$
30	492.03	0.002032	-8.9958
20	490.62	0.002038	-9.3956
10	488.23	0.002048	-10.079
5	484.30	0.002065	-10.756
2	479.67	0.002085	-11.653
1	475.75	0.002102	-12.329
0.5	471.34	0.002122	-13.004
0.3	469.06	0.002132	-13.505

**Table S2** Data used to determine the Ozawa-Flynn-Wall equation.

$\beta$ , K·min <sup>-1</sup>	$T_{\max}$ , K	$1/T_{\max}$	$\log\beta$
30	492.03	0.002032	1.477121
20	490.62	0.002038	1.301029
10	488.23	0.002048	1
5	484.30	0.002065	0.698970
2	479.67	0.002085	0.301029
1	475.75	0.002102	0
0.5	471.34	0.002122	-0.301029
0.3	469.06	0.002132	-0.522878