**Electronic Supplementary Information.** Additional table T1 and figures S1, S2, S3A, S3B, S3C and S4 are presented here. X-ray crystallographic information files (CIFs) are also available for the two polymorphic forms of the compound under study. This information is available free of charge via the Internet at <u>http://pubs.rsc.org</u>.

		LT-Polymorph II
Crystal data	Empirical formula	$C_{14}H_{12}N_2O_4$
	Fw	272.26
	Crystal system	Orthorhombic
	Space group	Pbca (No. 61)
	- F	12.4915(15)
	a, b, c (Å)	7.5972(14)
	,, ()	26.1737(18)
	α, β, γ (°)	90 90 90
	V (Å <sup>3</sup> )	2483.9(6)
	Z	8
	$\rho_{calcd}$ (g/cm <sup>3</sup> )	1.456
	Mu (MoKα)	
	(/mm)	0.109
	F(000)	1136
	Crystal size (mm)	0.40 / 0.35 / 0.20
	Т (К)	105
Collection data	Radiation (Å)	Μο Κα : 0.71073
	θ min. & max. (°)	3.2 - 29.3
	Tot., Uniq., R(int)	9181, 3027, 0.026
	Obs. data	2561
Refinement	$R[I > 2\sigma(I)]$	0.0419
	wR2[all]	0.1043
	GoF	1.09
	Residual density	-0.21, 0.27

Table T1. Main Crystallographic Data for Low-Temperature SCXRD of Polymorph II.



**Figure S1.** PXRD patterns of 3-nitroaniline (blue, on the bottom), o-vanillin (red) and dryground samples (green) are compared with experimental patterns for Form I and II, showing that form produced by dry-grinding is Form I.



**Figure S2.** Highlighted  $\pi$ - $\pi$  stacking interactions in Form I.



Figure S3A. DSC heating/cooling (dotted line) cycle for Form I (5°C/min,  $T_m$ : 143.5°C,  $T_{cryst}$ : 109.8 °C)



**Figure S3B.** DSC heating/cooling (dotted line) cycle for Form II (5°C/min,  $T_m$ : 144.5°C,  $T_{cryst}$ : 109.2°C)



**Figure S3C.** Superposition of second heating step for form II (blue dotted line,  $(5^{\circ}C/min, T_m: 144.1^{\circ}C)$  and melting point of Form I.



**Figure S4.** ORTEP diagram (50% probability ellipsoids) for compound (1) at low-temperature in crystals belonging to polymorph I. An average structure has been refined with highlighting of a weak residual density peak on nitrogen atom.