

Investigated the effect of crystallization temperature on the formation of form II of paracetamol (Orthorhombic)

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Summary: *Paracetamol form II (PARII, orthorhombic) was prepared from PAR form I (PARI, monoclinic) by melt crystallization method using tempering operation between two slides. From the FT - IR and Raman spectrums of sample and products, we found that four products PARII are (50 - 90°C), (50 - 95°C), (55 - 90°C) and (55 - 95°C). Temperature range suitable for the type II form of paracetamol is $50^{\circ}\text{C} \leq t_1 \leq 55^{\circ}\text{C}$, $90^{\circ}\text{C} \leq t_2 \leq 95^{\circ}\text{C}$. Finally, the XRD spectra was used to calculate some primary parameter of PARI and PARII.*