

Solid Formulation of Liquid Drug Propofol via Cocrystallization

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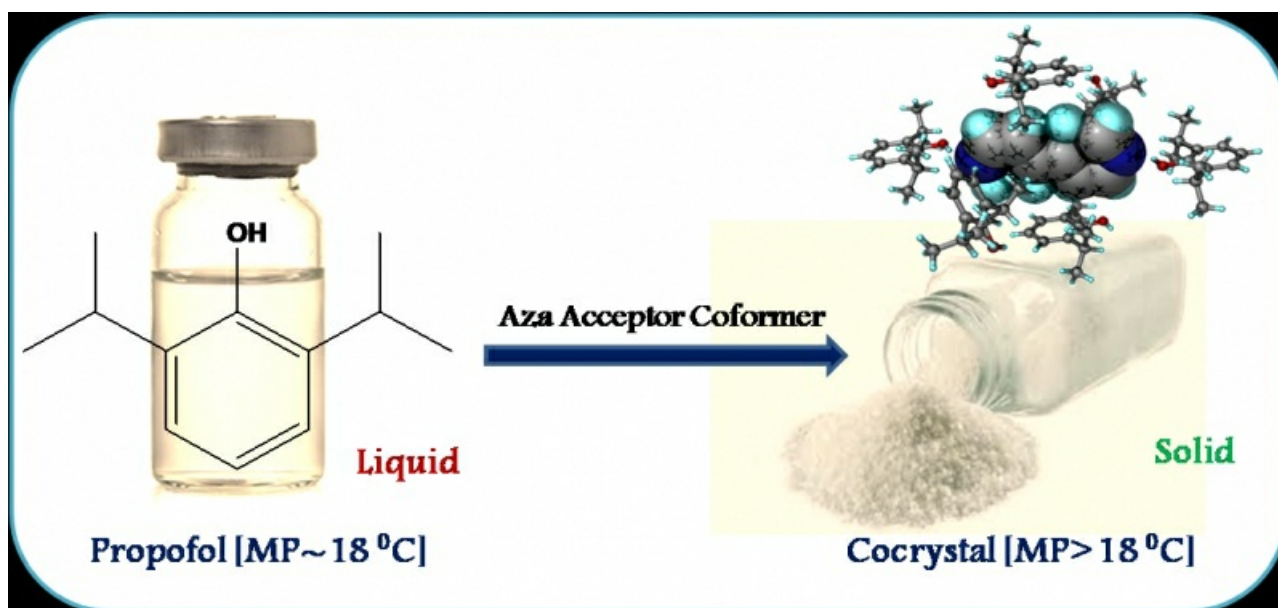
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Propofol, a liquid anesthetic drug has been chosen to formulate in solid forms based on crystal engineering principles. Several cocrystals were prepared with aza-based aliphatic and aromatic molecules as cocrystal formers. All product materials were characterized by spectroscopy, thermal analysis and X-ray diffraction. All materials showed improved aqueous solubility and in vitro membrane permeability. Reason for alteration of solubility and permeability is attributed to change in crystal packing manifested by weak interactions such as hydrogen bonding, C-H...π, π...π etc. between solute...solute and solute...solvent interactions.

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[2] Saikia, B. et al. (2016). CrystEngComm. 18, 8454-8464



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