

The Solubility of IPBC in Alcohols at Several Temperatures

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The importance of antibacterial agents is well recognized, due to their applications in many industrial processes, particularly in the daily necessities, clothes, and cosmetics. Among antibacterial agents, IPBC is effective in reducing and controlling bacterial contamination of the treated products even at low concentrations. And IPBC does not have corrosiveness, irritation. In addition, IPBC is non-metallic, non-phenolic, formaldehyde-free type antibacterial agent. So IPBC is widely used in many products such as lubricating oil, textile, paper, ink, shampoo, etc.

The purification of IPBC can be performed by crystallization using various solvents and obviously crystallization relies upon the solubility. Accordingly, the solubility data is very important in the industrial application including purification. In this work, the solubility of IPBC has been measured in various alcohols (Ethanol, 1-Propanol, 1-Butanol, 1-Pentanol, 1-Hexanol, 1-Heptanol) at several temperatures (35°C, 45°C, 55°C,).