

# Mesophase and Glass Formation in Binary Systems of Caesium and Alkali-Earth Metal Butyrates

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The phase diagrams of the binary systems of non-mesomorphic components such as caesium–magnesium, caesium–calcium and caesium–barium butyrates have been studied by differential thermal analysis and hot stage polarization microscopy. Smectic liquid crystals are found in some composition ranges of the binaries with calcium and barium butyrates. The liquid crystal appearance in these systems is explained by the exhibition of latent mesomorphism of caesium butyrate. Glasses are obtained in all systems studied, the formation of vitreous optical anisotropic mesophase being revealed only for binary from caesium and barium butyrates.

*Key words:* Phase Diagram; Mesophase; Glass; Metal Alkanoate.