

# Phase characterization of LC (meth)acrylic monomers based on $\omega$ -hexyloxy- and $\omega$ -undecyloxy-salicylalimine groups with different alkoxy tail substitutions

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The synthesis and phase characterization of three homologous series of liquid crystalline acrylic and methacrylic monomers, consisting of 21 new compounds are presented. They are based on  $\omega$ -hexyloxy- and  $\omega$ -undecyloxysalicylalimine groups with different alkoxy tail substitutions. The liquid crystalline materials were characterized by polarizing optical microscopy and differential thermal analysis. Smectic A and tilted smectic C phases were observed in the compounds. Near the transition to the isotropic, a narrow nematic phase, coexisting with the smectic A phase, was detected for the pentyloxy and hexyloxy derivatives in the M11 and A11 series. In case of M11R11 and M11R12 only a tilted smectic C phase was detected. The clearing point was comparable for all series, around 100°C.