

# A Novel Method for the Evaluation of Jettability

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## Abstract

*Assessment of the jettability of inks is essential in the process of developing ink formulations and in the process of verifying suitability of inks for print-head assemblies. Currently, evaluation of jettability of inks has largely relied on testing the inks in the print-head assemblies concerned, which, whilst being a reliable method, does have its drawbacks. Thus, there is a high level of risk of the inks of poor performance properties damaging the print-head. This paper describes a method for the assessment of the jettability of inks through the creation of a “jettability plot” using easily measurable properties such as viscosity and surface tension of the ink. Thus, for each print-head assembly, a jettability plot can be created which contains jettable and un-jettable regions. Consequently, the assessment of the jettability of an ink can be achieved by measuring the viscosity and surface tension of the ink followed by determination of which region the viscosity/surface*

*tension combination falls in. Various application examples are included in this paper.*

## Author Biography

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Weidong obtained her PhD (1995) at Leeds University and is currently a Senior Research Fellow in Department of Colour Science at Leeds University. Both Long and Weidong specialise in pigment/dye/polymer chemistry, anti-counterfeit/brand protection solutions, inks/coating formulations, organic synthesis, polymer synthesis and application.