

Tack is defined as the resistance to splitting of an ink film between two separating surfaces, e.g. between inking rollers or in the printing nips. This is an important empirical characteristic of printing inks. The higher the tack value, the greater the energy consumption and heat generation between the rollers in the inking system. Tack also improves the adhesion of the ink on the printing surface of the plate or blanket, thus giving a sharper and cleaner printed image. However, a higher tack value increases picking of fibres and other particles from the paper surface, holding them onto the printing plates and other parts of the printing press. This is one of the reasons why printing inks for the comparatively poor surface strength newsprints generally have a lower tack value than those for other paper grades. In general, letterpress newsinks have a lower tack value than those for offset printing. This difference can be more marked when printing from photopolymer letterpress plates.

Tack is an empirical variable whose numerical value depends to an even greater degree than the other rheological values on the measuring equipment used. The tack value can be lowered by making the ink either shorter or less viscous.