

Surface tension and CMC of NEODOL ethoxylates

Aqueous solutions of non-ionic surfactants exhibit significantly lower surface tensions and consequently better wetting characteristics than water alone. As ethoxylate concentration increases in very dilute solutions, surface tension decreases. This effect continues until a particular concentration is reached above which the surface tension remains nearly constant. This particular concentration is termed the "critical micelle concentration" (CMC) of the ethoxylate. In emulsification and cleaning applications, an ethoxylate generally is much less effective at concentrations below the CMC value.

CMC - derived from surface tension (dyne/cm) versus concentration - measured at 24 °C in deionised water

CMC, %m/m	
	CMC
NEODOL 91-6	0.029
NEODOL 91-8	0.038
NEODOL 1-9	0.024
NEODOL 23-6.5	0.0027
NEODOL 25-7	0.0016
NEODOL 25-9	0.0015
NEODOL 135-7	0.0016
NEODOL 135-9	0.0038
NEODOL 45-7	0.00066

- NEODOL is a trademark of the Shell Group of Companies



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