# REDUCED-RESIDUE HARD SURFACE CLEANER AND METHOD FOR DETERMINING FILM/STREAK

## ABSTRACT

Dilutable concentrates useful for hard surface cleaners with improved film/streak performance on high-energy surfaces are disclosed. The concentrates comprise a nonionic alkoxylated surfactant and a polyetheramine. A relatively minor proportion of a polyetheramine can resolve film/streak issues that characterize hard surface cleaners formulated with nonionic surfactants. The efficacy of polyetheramines for improving film/streak performance of hard surface cleaners formulated with nonionic alkoxylated surfactants far exceeds the benefits available from known improvements, such as the use of hydrotropes. Other inventive dilutable concentrates and hard surface cleaners comprise an amine-functional hydrophobe and an auxiliary surfactant. Still other dilutable concentrates or hard surface cleaners comprise a nonionic alkoxylated surfactant and lactic acid. An improved method for measuring film/streak properties of hard surface cleaners is also disclosed.

No figure