

Title (en)

Composition for machine dishwashing and rinsing comprising a blend of nonionic surfactants

Title (de)

Eine Mischung von nichtionischen Tensiden enthaltende Zusammensetzung zum maschinellen Reinigen und Spülen von Geschirr

Title (fr)

Composition pour le lavage et le rinçage de la vaisselle en machine contenant une mélange d'agents tensio-actifs

Publication

**EP 0687720 A2 19951220 (EN)**

Application

**EP 95109017 A 19950612**

Priority

- US 26114594 A 19940614
- US 26114494 A 19940614

Abstract (en)

A machine dishwashing composition is provided wherein two specifically defined nonionic surfactants are utilized which in combination have been shown through empirical research to surprisingly yield improved results. One of the nonionic surfactants is an alcohol alkoxylate (as defined) and the other nonionic surfactant is a block copolymer of ethylene oxide and propylene oxide (as defined). The use temperature for efficient cleaning while using the composition extends over a broad range up to at least 140 DEG F. in the absence of deleterious foaming even in the presence of protein soil (e.g., egg and/or milk soil). Further, an aqueous rinse-aid composition for kitchen utensils is provided wherein an anionic hydrotrope and a blend of two specifically defined nonionic surfactants are utilized which has been shown through empirical research to surprisingly yield improved results. One of the nonionic surfactants is an alcohol alkoxylate (as defined) and the other nonionic surfactant is a block copolymer of ethylene oxide and propylene oxide (as defined). The composition is suitable for use at a temperature of up to at least 180 DEG F. in the absence of excessive foaming, spotting and film formation. The components of the composition exhibit good compatibility during storage even if elevated temperatures are experienced thereby maintaining reliable performance upon usage. Rapid high velocity rinsing at a high temperature is made possible in the absence of deleterious foam generation to yield dishes and tableware that can be readily dried without the need for the time consuming hand removal of deleterious spots and/or film.

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IPC 8 full level

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CPC (source: EP)

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Cited by

US9969959B2; US10392584B2; WO2015134404A1; CN1091642C; GB2327948A; EP1553160A1; US2015252296A1; US10501708B2; US2015252295A1; US9796947B2; US2018010068A1; EP1550710A1; CN106103679A; CN113736588A; EP4227391A1; WO2016094812A1; WO2005066322A1; US11905493B2; US11932830B2; US10774291B2

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