

Title (en)  
LIQUID DETERGENT COMPOSITION

Title (de)  
FLÜSSIGE REINIGUNGSMITTELZUSAMMENSETZUNG

Title (fr)  
COMPOSITION DÉTERGENTE LIQUIDE

Publication  
**EP 2489722 A4 20160601 (EN)**

Application  
**EP 10823438 A 20101014**

Priority  
• JP 2009238354 A 20091015  
• JP 2010068049 W 20101014

Abstract (en)  
[origin: EP2489722A1] The invention relates to a liquid detergent composition includes: a component (A) which includes a nonionic surfactant represented by the formula  $R_1 O(CH_2 CH_2 O)_n H$ ; a component (B) which includes at least one species of anionic surfactant selected from the group consisting of compounds represented by the formulas  $R_2 CH(SO_3 M_1)COOR_3$  and  $R_4 CH(SO_3 M_2)CONHR_5$ ; and a component (C) which includes at least two species of water-miscible solvents selected from the group consisting of methanol, ethanol, propanol, butanol, ethylene glycol, propylene glycol, butylene glycol, butyl carbitol, phenoxy ethanol, and polyethylene glycol with an average molecular weight of 570 to 3800, wherein the total amount of the component (A) and the component (B) is in the range of 40 to 75 % by mass and the mass ratio of the amount of the component (B) with respect to the total amount of the component (A) and the component (B) satisfies  $\text{component (B)} / (\text{component (A)} + \text{component (B)}) = 1/10$  to  $6/10$ . The invention can provide a liquid detergent composition which includes a surfactant at a high concentration and which has superior low-temperature preservation stability and superior low-temperature solubility and sebum detergency during washing.

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Citation (search report)  
• [A] WO 9711143 A2 19970327 - STEPAN CO [US], et al  
• [A] WO 9957234 A1 19991111 - AMWAY CORP [US], et al  
• See references of WO 2011046170A1

Cited by  
KR20150064025A; EP2905325A4; JP2015101674A; US11447720B2; US9914900B2; WO2024012769A1

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DOCDB simple family (publication)  
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