

Title (en)  
Enzymatic detergent composition.

Title (de)  
Enzymatische Waschmittelzusammensetzung.

Title (fr)  
Composition détergente enzymatique.

Publication  
**EP 0341999 A1 19891115 (EN)**

Application  
**EP 89304717 A 19890510**

Priority  
GB 8811045 A 19880510

Abstract (en)  
A detergent composition comprising an anionic surfactant, a nonionic surfactant and a lipase enzyme, characterised in that: (a) the nonionic surfactant of the composition comprises a nonionic surfactant component selected from alkoxyate adducts of fatty alcohols, fatty acids, fatty esters, fatty amides and fatty amines of at least C10 chain length and mean alkylene oxide content of less than 5 alkylene oxide groups per molecule, forming at least 30% by weight of the total nonionic surfactant of the composition; and in that (b) the total amount of the nonionic and anionic surfactant in the composition is in the range 1% to 30% by weight; and (c) the lipase enzyme is present in an amount of about 0.005 to 100 Lu/mg based on the weight of the detergent composition. n

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**C11D 3/386**

IPC 8 full level  
**C11D 3/386** (2006.01)

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Citation (search report)  
• [XD] FR 2121170 A5 19720818 - UNILEVER NV  
• [AD] EP 0206390 A2 19861230 - UNILEVER NV [NL], et al  
• [A] FR 2072316 A5 19710924 - PROCTER GAMBLE EUROP  
• [A] EP 0171006 A2 19860212 - HENKEL KGAA [DE]

Cited by  
EP0399681A3; BE1009312A3; US5698508A; EP0468102A1; WO2014200658A1; WO2014200656A1; WO2014204596A1; WO9533041A1; WO9634936A1; WO9743375A1; WO2017173324A2; WO2017173190A2; WO2015050723A1; WO2015077126A1; WO2014200657A1; WO2015050724A1; EP0694060B1

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