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Površinsko aktivne snovi - Določevanje topil z visokim vreliščem v tekočih detergentih s plinsko tekočinsko kromatografijo (GLC)

Surface active agents - Determination of content of high boiling solvents in liquid detergents by GLC

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Surface active agents - Determination of content of high boiling solvents in liquid detergents by GLC

Agents de surface - Détermination de la teneur en solvants à point d'ébullition élevé dans les détergents liquides par chromatographie en phase gazeuse

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Foreword

This document (prEN 14981:2004) has been prepared by Technical Committee CEN/TC 276 "Surface active agents", the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

Annexes A and B are informative.

1 Scope

This European Standard specifies a method for the identification and quantification of high boiling point solvents in finished products and raw materials.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 607, *Surface active agents and detergents - Methods of sample division.*

3 Term and Definition

For the purposes of this European Standard, the following term and definition applies:

3.1
high boiling solvent
solvent, mainly glycol and glycol ether product, with a boiling point significantly higher than water (100 C)

4 Principle

The organic solvents are determined by gas chromatography. The sample is dissolved in ethanol and injected on a polar phase capillary column and the unknown solvent identified by its retention time. After qualitative determination, the solvent is quantified using Carvone (2-Methyl-5-(1-methylethenyl)-2-cyclohexene-1-one) as internal standard.

5 Reagents

During the analysis, unless otherwise specified, use only reagents of recognized analytical grade and have been checked in advance as to not interfere with the analytical results.

5.1 Absolute ethanol.

5.2 Carvone (2-Methyl-5-(1-methylethenyl)-2-cyclohexene-1-one), minimum 99.5% purity.

5.3 Ethyleneglycol diethylether, purest grade available.

5.4 Propyleneglycol monomethylether, purest grade available.

5.5 Ethyleneglycol monomethylether, purest grade available.

5.6 Limonene, minimum 99.5% purity.

5.7 Propyleneglycol tert-butylether, purest grade available.

5.8 Ethyleneglycol monoethylether, purest grade available.

5.9 Ethyleneglycol monoisopropylether, purest grade available.

5.10 Propyleneglycol monoisobutylether, purest grade available.