

geregistreeerde  
Belgische norm

**NBN EN 12137**

1e uitg., november 1997

Normklasse : V 15

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**Vruchten- en groentesappen - Bepaling van het gehalte aan  
wijnsteenzuur van druivesap - Methode met  
hogedrukvlloeistofchromatografie**

*Fruit and vegetable juices - Determination of tartaric acid in grape juices - Method by high performance liquid chromatography*

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Deze Europese norm bestaat in drie officiële versies (Duits, Engels, Frans).

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norme belge  
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**NBN EN 12137**

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Indice de classement : V 15

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**Jus de fruits et de légumes - Dosage de l'acide tartrique dans les jus de raisin - Méthode de chromatographie liquide à haute performance**

*Fruit and vegetable juices - Determination of tartaric acid in grape juices - Method by high performance liquid chromatography*

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La présente norme européenne existe en trois versions officielles (allemand, anglais, français).

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Descriptors: fruit and vegetable juices, grapes, chemical analysis, determination of content, tartaric acid, high performance liquid chromatography, procedure

English version

**Fruit and vegetable juices - Determination of tartaric acid in  
grape juices - Method by high performance liquid  
chromatography**

Jus de fruits et de légumes - Dosage de l'acide tartrique  
dans les jus de raisin - Méthode par chromatographie  
liquide à haute performance

Frucht- und Gemüsesäfte - Bestimmung von Weinsäure in  
Traubensaft - Hochleistungs-  
flüssigkeitschromatographisches Verfahren

This European Standard was approved by CEN on 6 September 1997.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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## Contents

Foreword.....	3
1 Scope .....	4
2 Normative references .....	4
3 Symbols.....	4
4 Principle .....	4
5 Reagents .....	4
6 Apparatus.....	5
7 Procedure.....	5
8 Calculation .....	6
9 Precision .....	6
10 Test report.....	7
Annex A (informative) Bibliography .....	8
Annex B (informative) Statistical results of the interlaboratory test.....	9

## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 174 "Fruit and vegetable juices - Methods of analysis", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 1998, and conflicting national standards shall be withdrawn at the latest by March 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies a method for the determination of tartaric acid in grape juices by high performance liquid chromatography (HPLC).

## 2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN ISO 3696	1995	Water for analytical laboratory use - Specification and test methods (ISO 3696:1987)
ISO 5725	1986	Precision of test methods - Determination of repeatability and reproducibility for a standard test method by inter-laboratory tests

## 3 Symbols

For the purposes of this standard, the following symbol applies :

*c* substance concentration

## 4 Principle

The content of tartaric acid in grape juices is determined by HPLC (using ultraviolet-detection). The separation takes place on an ion-exclusion column.

## 5 Reagents

### 5.1 General

Use only reagents of recognized analytical grade and only water in accordance with at least grade 1 of EN ISO 3696:1995.

**5.2 Sulfuric acid,  $c(\text{H}_2\text{SO}_4) = 0,005 \text{ mol/l}$**

**5.3 Standard tartaric acid solution ( $\text{C}_4\text{H}_6\text{O}_6$ )**

A defined quantity of tartaric acid is dissolved in water. The concentration should be approximately 500 mg/l.