Commission Implementing Regulation (EU) No 974/2014 of 11 September 2014 laying down the refractometry method of measuring dry soluble residue in products processed from fruit and vegetables for the purposes of their classification in the Combined Nomenclature

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Council Regulation (EEC) No 2658/87 of 23 July 1987 on the tariff and statistical nomenclature and on the Common Customs Tariff[(1)], and in particular Article 9(1) (a) thereof,

Whereas:

(1) Regulation (EEC) No 2658/87 established a nomenclature of goods, hereinafter referred to as the 'Combined Nomenclature' or 'CN', which is set out in Annex I to that Regulation.

(2) Commission Regulation (EEC) No 558/93[(2)] established the refractometry method to be used for measuring the content of sugar in products processed from fruit and vegetables for the purposes of Additional note 1 to Chapter 8 of the CN and Additional notes 2 and 6 to Chapter 20 of the CN.

(3) Regulation (EEC) No 558/93 was removed from the active *acquis* by the Commission in its Communication 2009/C 30/04[(3)].

(4) Although Regulation (EEC) No 558/93 was removed from the active *acquis*, a refractometry method is still necessary for the customs laboratories in the Member States as an important and irreplaceable tool to determine the content of various sugars expressed as sucrose of products of Chapters 8 and 20 of the CN.

(5) In order to ensure that customs authorities apply a uniform approach for the purposes of customs classification, it is necessary to establish a method for measuring the content of dry soluble residue in products processed from fruit and vegetables.

(6) For this purpose it is appropriate to use a refractometry method inspired by the method laid down in Regulation (EEC) No 558/93 and taking into account the experience acquired from technological advance in laboratory techniques and accumulated scientific expertise.

(7) The measures provided for in this Regulation are in accordance with the opinion of the Customs Code Committee,

Changes to legislation: *There are currently no known outstanding effects for the Commission Implementing Regulation (EU) No 974/2014. (See end of Document for details)*

HAS ADOPTED THIS REGULATION:

Article 1

The method of measuring dry soluble residue in products processed from fruit and vegetables to be used for determining the content of sugar expressed as sucrose in products of Chapters 8 and 20 of the Combined Nomenclature for the purposes of their classification in the Combined Nomenclature is set out in the Annex to this Regulation.

Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 11 September 2014.

For the Commission,

On behalf of the President,

Algirdas ŠEMETA

Member of the Commission

***Changes to legislation:** There are currently no known outstanding effects for the Commission Implementing Regulation (EU) No 974/2014. (See end of Document for details)*

ANNEX

METHOD OF MEASURING DRY SOLUBLE RESIDUE IN PRODUCTS PROCESSED FROM FRUIT AND VEGETABLES BY REFRACTOMETRY (DETERMINATION OF THE BRIX-VALUE)

1. DEFINITION

Dry soluble residue content (Brix value, determined by refractometry) means the percentage weight of sucrose in an aqueous solution of sucrose which, under given conditions, has the same refractive index as the product analysed.

2. APPARATUS

The principal type of apparatus to be used is the Abbe-type refractometer. Alternatively, the use of a digital refractometer is permitted.

This apparatus must enable the percentage weight of sucrose to be determined to the nearest ± 0,1 %.

The refractometer must be calibrated at 20 °C by a system that enables the temperature of measurement cell to be adjusted from + 15 °C to + 25 °C with an accuracy of ± 0,5 °C.

Operating instructions for this apparatus, and in particular those dealing with calibration and light source, must be strictly followed.

3. METHOD

3.1. **Preparation of the sample**

3.1.1. *Liquid products*

Mix carefully and proceed to determination.

3.1.2. *Semi-dense products, purées, fruit juices with matter in suspension*

Carefully mix an average laboratory sample and then homogenize.

Strain a part of the sample through dry gauze folded in four, remove the first drops and proceed to the determination on the filtrate.

3.1.3. *Dense products (jams and jellies)*

If the previously homogenized product cannot be used directly, weigh 40 g of the product to the nearest 0,01 g in a 250 ml beaker and add 100 ml of distilled water.

Boil gently for two or three minutes, stirring with a glass rod.

Cool, pour the contents of the beaker into an appropriate tared vessel using distilled water as a flushing liquid, add distilled water so as to obtain about 200 g of product, weigh it to the nearest 0,01 g, and mix the solution thoroughly.

Allow to stand for 20 minutes, then strain through a folded filter or a Büchner funnel. Make a determination on the filtrate.

3.1.4. *Frozen products*

Defrost and remove stones or pips and cores.

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Mix the product with the liquid formed during defrosting and proceed as in points 3.1.2 and 3.1.3 respectively.

3.1.5. *Dry products or products containing whole fruit or pieces of fruit*

Cut the laboratory sample — or part of it — into small pieces, remove stones or pips and cores and mix carefully.

Weigh 10 to 20 g of the product to the nearest 0,01 g in a beaker.

Add distilled water corresponding to five times the weight of the product.

Heat in a bath of boiled water for 30 minutes stirring occasionally with a glass rod.

When cool, continue as described in point 3.1.3.

3.1.6. *Products containing alcohol*

Weigh about 100 g of the sample to the nearest 0,01 g in a tared beaker.

Place the beaker in a bath of boiled water for 30 minutes, stirring occasionally with a glass rod, and add distilled water if necessary.

Where the alcohol content exceeds about 5 % mass add more distilled water and heat again in the bath of boiled water for 45 minutes.

After cooling weigh the final contents of the vessel, filter if necessary, and continue with the determination.

3.2. **Determination**

The principle is the deduction of the dry soluble residue content of a product from its refractive index.

The measurement temperature shall be between 15 and 25 °C.

By using a digital refractometer the temperature shall be at 20 °C.

Bring the sample to the measurement temperature by immersing the container in a water bath at the required temperature.

Place a small sample on the lower prism of the refractometer, taking care to ensure that the sample covers the glass surface uniformly when the prisms are pressed against each other.

Measure in accordance with the operating instructions for the apparatus used.

Read the percentage weight of sucrose to the nearest 0,1 %.

Make at least two determinations on the same prepared sample.

4. EXPRESSION OF RESULTS
Calculation and formulation

The dry soluble residue content is expressed in grams per 100 grams of the product (g/100 g). This is equivalent to a value in °Brix.

The dry soluble residue content shall be calculated as follows:

The percentage sucrose content indicated by refractometry shall be used directly.

If the reading is made at a temperature other than + 20 °C, correct as indicated in table 1.