

## EUTECA DECISION-TREE

### How to distinguish between Caramel Colour I/E150a (food additive colour) and Burnt Sugar<sup>1</sup> (aromatic foodstuff)

The purpose of this decision-tree, which was agreed by EUTECA members at the General Assembly in October 2010, is to distinguish the food additive colour “plain caramel” (E150a) and aromatic foodstuffs (Burnt sugars) by a simple yes/no decision cascade. The tree should increase legal certainty regarding that decision for the manufacturer/marketer of the material and for those food producers, who use the material primarily as an ingredient to colour (food colour additive) or to give primarily taste to a certain composed food.

For labelling purposes, we refer to the provisions of the general food law and – if applicable specifically, but not exclusively – the EU Directive 2000/13/EC on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs<sup>2</sup>.

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<sup>1</sup> ‘Burnt sugar’ is a light to dark brown liquid or solid which is obtained from controlled heating of **sugars** and which is used primarily for flavouring and/or sweetening; a product used primarily for colouring shall be labelled as “Plain Caramel” or “E 150a”. Commonly, the colouring capacity of the products is up to around 16.000 EBC. The manufacturer of the finished foodstuff should decide which purpose, colouring or flavouring, this product serves in the foodstuff.

Other terms historically used to describe this material include ‘Caramelized Sugar’, ‘Caramelized Syrup’, or ‘Aromatic Sugar’. Burnt sugar is sold under other denominations in various countries, including (non-exhaustive list):

in France: caramel aromatique, or caramel; caramel menagère, caramel pâtissier

in Germany: Karamell, Karamellzuckersirup;

in Italy: caramello, zucchero caramellato;

in Spain and Portugal: caramelo, caramelo aromático;

in Greece; aromatiki karamela.

<sup>2</sup> *Directive 2000/13/EC* ( [http://eur-lex.europa.eu/pri/en/oj/dat/2000/l\\_109/l\\_10920000506en00290042.pdf](http://eur-lex.europa.eu/pri/en/oj/dat/2000/l_109/l_10920000506en00290042.pdf))

#### **Article 2**

1. *The labelling and methods used must not:*

(a) *Be such as could mislead the purchaser to a material degree, particularly:*

(i) *As to the characteristics of the foodstuff and, in particular, as to its nature, identity, properties, composition, quantity, durability, origin or provenance, method of manufacture or production;*

(ii) *By attributing to the foodstuff effects or properties which it does not possess;*

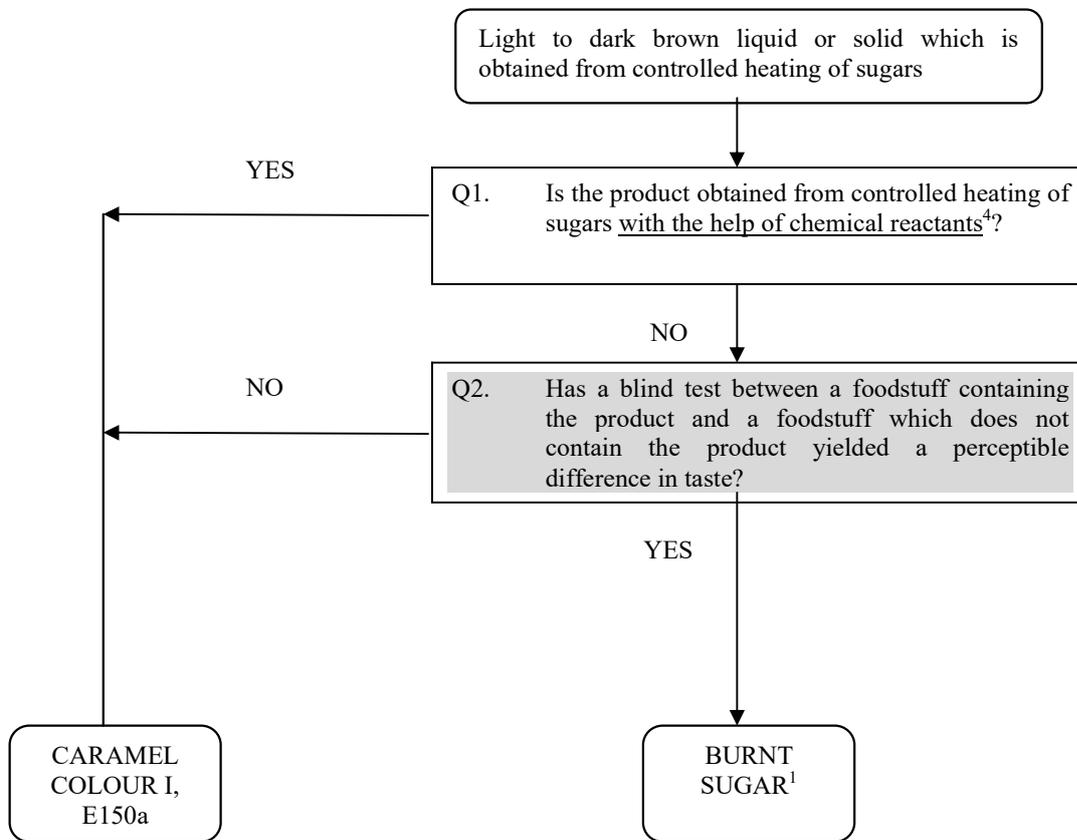
(iii) *By suggesting that the foodstuff possesses special characteristics when in fact all similar foodstuffs possess such characteristics;*

#### **Article 6**

Point 6 – 2<sup>nd</sup> indent

- *Ingredients belonging to one of the categories listed in Annex II must be designated by the name of that category, followed by their specific name or EC number; if an ingredient belongs to more than one of the categories, the category appropriate to the principal function in the case of the foodstuff in question shall be indicated.*

Question 2 in the decision-tree is the section where we suggest manufacturers or customers may do a taste test to determine whether the addition of material caused a taste difference, and hence can help differentiate what the material is. To help achieve consistency in this taste test, we suggest that either the ISO standard: ISO 4120:2004 “Sensory analysis – Methodology – Triangle Test”<sup>3</sup> or another well established triangular test standard of equivalent quality (carried out according to Good Laboratory Practice), should be employed to help determine if there is indeed a taste difference. Such test standards should describe a procedure for determining whether a perceptible sensory difference or similarity exists between samples of two products. They should outline test conditions and requirements, procedure, analysis and interpretation of results. This consistency of method should help manufacturers or customers at Question 2 stage.



<sup>3</sup> [http://www.iso.org/iso/catalogue\\_detail?csnumber=33495](http://www.iso.org/iso/catalogue_detail?csnumber=33495)

<sup>4</sup> Chemical reactants include permitted food-grade acids, alkalis, and salts employed to assist caramelization but do not include adjustment by food-grade acids or alkalis after controlled heating. In France small quantities of organic acids can be added during the process of production of burnt sugars in order to promote the hydrolysis of sugar (AFNOR Standard NF V 00-100).