

Science et technologie au service de la création culinaire

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Decor sugar

Ingredients

Isomalt (E953)

Culinary data

Decor sugar is a sweetener. It also uses as a decorating agent It enables:

- to texture preparations even salted,
- to give a crispy texture,
- to prepare clear and bright decorations,
- to provide a cooling effect



Dissolution

Decor sugar is soluble in water. At 25°C, 39g of Decor sugar can be dissolved in 100g of water.

Sensory properties

Its sweetening power is half as high than that of sucrose. Decor sugar brings a crispy and bright texture to the product.

Comparaison au saccharose

The thermal stability of Decor sugar is higher than sucrose. It melts between 140 and 150°C but it remains clear even heated over 180°C. In 100g of water, 185g of sucrose can be dissolved: Decor sugar is less soluble than sucrose. It is less hygroscopic than sucrose, i.e it less rapidly absorbs water from room humidity

Preservation

Decor sugar slowly absorbs room humidity. Decor sugar made of products keep their crispy and bright properties in time.

Storage

Store in a closed hermetic packaging, in a cool and dry place.



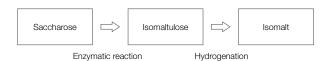
Toxicological data

- The used quantity shouldn't exceed the concentrations used to obtain the desired effect.
- No acceptable daily intake level.
- An excessive consumption may have laxative effects.

Scientific data

Origin

Isomalt is produced by hydrogenation of isomaltulose, a naturally present in honey and cane sugar or synthesized from sucrose by enzymatic reaction.



Isomalt production from saccharose

Chemical composition

Isomalt is sugar alcohol (sugar derivative) consisted in an equimolar mixture of two molecules.

- Informations extracted from:

 Belitz et al., **2004**. *Food chemistry* 3rd revised edition. Springer Elvesier.

 Gabriel, J.P. **2009**. *La Cuisine contemporaine* Les Essentiels.

 Unilever Food Solutions, 80-81.