



# ACESULFAME K

## **DESCRIPTION**

Acesulfame K (INS 950, E 950) is a calorie-free sweetener discovered in 1967.

## **RELATIVE SWEETNESS**

130-200 times sweeter than sucrose.

## **METABOLISM**

Acesulfame K is not metabolised by the body and is excreted by the kidneys unchanged.

## **BENEFITS**

- The calories in foods and beverages can be reduced by substituting acesulfame-K for sugar
- A rapidly perceptible sweet taste
- It has a good shelf life and is very stable with normal preparation and processing of foods
- Heat resistant, therefore suitable for cooking and baking
- Does not promote tooth decay
- Suitable for diabetics
- Synergistic when combined with caloric and non-caloric sweeteners (the combinations are sweeter than the sum of the individual sweeteners)
- Enhances and intensifies flavours

## **APPLICATIONS**

It can be used in all applications where sweeteners are presently used:

- carbonated beverages
- non-carbonated beverages
- fruit nectars
- beverage concentrates
- alcoholic beverages
- table-top sweeteners
- dairy products
- ice-cream
- desserts, gelatins
- fruit and vegetable preserves
- marmalade and jam
- baked goods
- confectionery
- chewing gum



- pickled vegetables
- sauces, dressings, condiments
- marinated fish
- toothpaste and mouthwash
- pharmaceuticals

## **SAFETY**

A multitude of safety studies have been conducted and no adverse effects were reported.

## **STATUS**

Acesulfame-K has been evaluated by several independent agencies and national food authorities including the Scientific Committee on Food (SCF) of the European Commission (2000) – now the European Food Safety Authority (EFSA) – the US Food and Drug Administration (FDA) (2003) and the Joint FAO/WHO Expert Committee on Food Additives (JECFA) (1990).

Acesulfame-K is approved for a variety of uses in the EU under the Sweetener Directive 94/35/EC and in more than 100 countries, including the USA, Japan, Switzerland, Norway, Canada and Australia.

In 2003 the US Food and Drug Administration (FDA) amended its food additive regulations to provide for the safe use of acesulfame-K as a general-purpose sweetener and flavour enhancer in food, not including meat and poultry.

## **ADI**

At international level (JECFA), as well as for the USA (FDA), the Acceptable Daily Intake (ADI) for acesulfame-K has been set at 15 mg/kg body weight. At European level, the ADI has been set at 9 mg/kg body weight (SCF).