



# CYCLAMATE

## DESCRIPTION

Cyclamate (INS 952, E 952) is a calorie-free sweetener discovered in 1937.

## RELATIVE SWEETNESS

30 to 50 times sweeter than sucrose.

## METABOLISM

Cyclamate is metabolised to a limited extent by the bacteria in the lower gut by some individuals; limited absorption by the body. Cyclamate that is absorbed from the gut is excreted unchanged by the kidneys.

## BENEFITS

- No calorie content
- Stable in high and low temperatures; good shelf life
- Pleasant taste profile
- Economic
- Suitable for cooking and baking
- Does not promote tooth decay
- Suitable for people with diabetes
- Synergistic when combined with other low-calorie sweeteners such as acesulfame-K, aspartame, neohesperidine DC, saccharin and sucralose (the combinations are sweeter than the sum of the individual sweeteners).

## APPLICATIONS

Cyclamate, particularly in combination with one or more other low-calorie sweeteners, has a wide range of applications in foods and beverages. It is used in the following categories:

- table-top sweeteners
- instant beverages
- soft drinks
- shakes
- ice tea



- sport drinks
- breakfast cereals
- dairy products
- cakes and baked products
- fruit preserves
- jams and marmalades
- puddings, flans and jellies
- biscuits
- chocolate
- dressings
- pharmaceuticals products

## **SAFETY AND STATUS**

Cyclamate has been approved by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) (1982) and by the Scientific Committee on Food (SCF) of the European Commission (2000) - now the European Food Safety Authority (EFSA). The Cancer Assessment Committee of the US Food and Drug Administration confirmed the safety of cyclamate in 1984 and the US National Academy of Sciences did the same in 1985.

Cyclamate is authorised in the EU under the Sweetener Directive 94/35/EC and is approved in more than 50 countries worldwide.

A petition for the re-approval of cyclamate is currently under review by the US Food and Drug Administration (FDA).

## **ADI**

The Acceptable Daily Intake (ADI) for cyclamate has been set at 11mg/kg body weight by JECFA and at 7mg/kg body weight by the SCF.