

Emulpals® 110

Product Profile



Product Type: A whipping emulsifier based on polyglycerol esters.

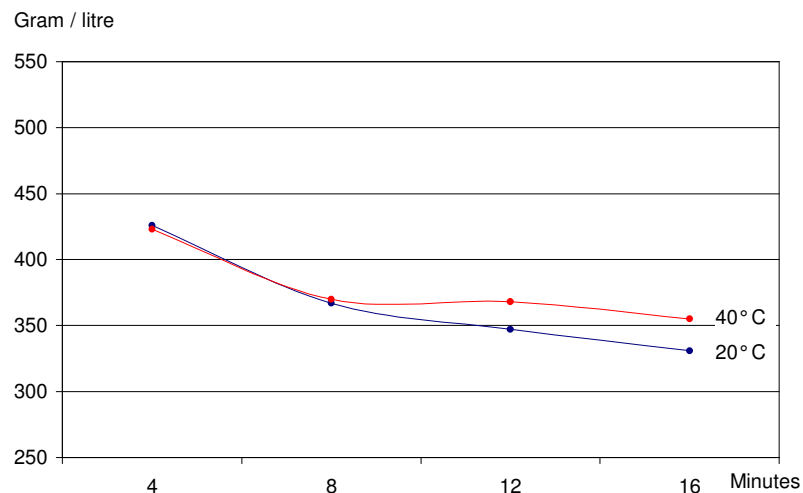
Application Areas: The emulsifiers applied in Emulpals® 110 are based on vegetable fat. The product can be provided with a non-GMO certificate. Emulpals® 110 is an all-round product that can be applied in a variety of cake products, e.g. sponge cakes, Swiss rolls, pound cakes etc. where all the ingredients can be added at once.

Functional Properties: Emulpals® 110 is a medium fast acting emulsifier with an excellent tolerance towards long whipping times.

The whipping profile of Emulpals® 110 is well suited in cake products requiring medium to longer whipping times. These properties ensure a baked product with a fine and regular crumb structure and a high volume.

A unique characteristic of Emulpals® 110 is its tolerance towards high and elevated storage temperature. Emulpals® 110 is able to keep the whipping functionality almost unchanged for a long period of storage.

Batter density at different whipping times



Whipping profile:

Identification: 97722501-ALL-E-PP.doc

Sponge cake with 5.2% Emulpals® 110, Hobart A-200 model, 3rd speed.
 The whipping time of 8-12 minutes provides the optimum whipping- and cake volume.
 The figures are the average of 1-year storage of the mix.

Due to the all-round properties and high degree of tolerance Emulpals® 110 is recommended for use in more demanding applications, e.g. cake mixes containing cocoa powder, dry egg powder or "Asian Style" sponge, where oil is added.

As Emulpals® 110 is based on a neutral carrier (native starch), the amount of colouring agent in the cake mix (e.g. skim-milk powder, dextrose, whey powder etc.) can be adjusted independently of the emulsifier level.

Emulpals® 110 can be combined with other whipping emulsifiers, like Emulpals® 115. This makes it possible for the product developer to tailor the whipping qualities to meet specific applications.

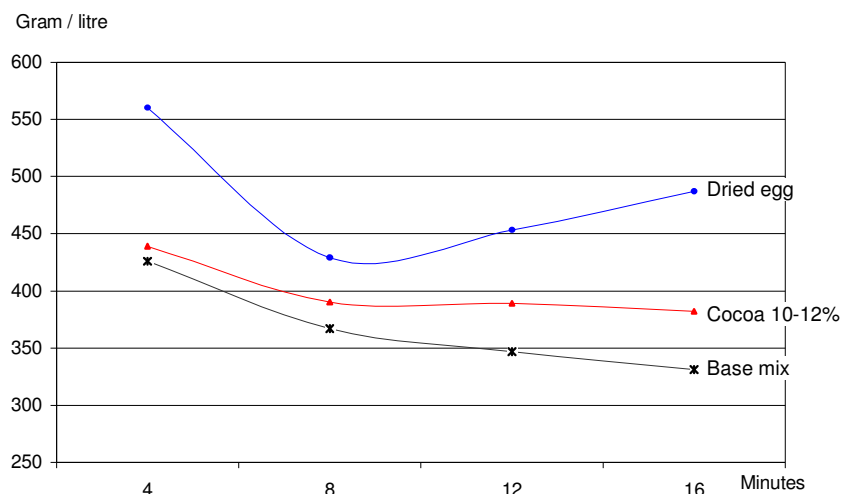
Dosage:

- Sponge cake/Swiss roll: 4-6% on dry ingredients
- Cocoa sponge cake: 5-6% on dry ingredients
- Pound cake/Madeira: 2-4% on dry ingredients

Internal investigations have shown that other ingredients in a mix can have influence on the performance of the emulsifier.

In the figure below you can find data from our continuous whipping test programme.

Batter density at different whipping times



Tolerance area:
 Sponge cake with Emulpals® 110, Hobart A-200 model, 3rd speed.
 The figures are the average of 1-year storage of the mix.