Application
In general, table margarine is used as a spread on bread. However, table margarine can be used for other domestic purposes such as baking and frying applications.

Recipe

Characteristics
Homogenous and spreadable at refrigerator temperature, pleasant flavor and mouth-feel, quick melt-down in the mouth are typical characteristics.

When using a fat blend with a relatively low melting point the above mentioned quick melt-down sensation in the mouth is achieved. Skim milk powder usually contributes with an improved flavor release. Trans fatty acid free products should have similar properties as products containing trans fatty acid. However, the partially hydrogenated oils contribute with plasticity to the product. The partly hydrogenated vegetable oils normally used in a traditional margarine are replaced with an interesterified hardstock. Palm oil has been added to achieve a SFC profile similar to conventional table margarine. Coconut oil is used in order to secure the quick melt-down sensation in the mouth.

Processing
- The ingredients for the aqueous phase are mixed.
- The ingredients for the fat phase are melted under agitation, typically the highest melting fats are added first and liquid oil last. The fat phase is then tempered to approximately 5-8°C higher than the melting point of the fat phase.
- Emulsifiers, which are mixed into liquid oil in the proportion 1:5, are heated and melted at a temperature approx. 5-8°C higher than the melting point of the emulsifiers, and added to the fat phase.
- Flavor and colors are added according to solubility.
- The aqueous phase is added under agitation to the fat phase.
- The complete emulsion is pasteurized which typically involve heating to 75-80°C for 15-20 sec. and cooling to 45-50°C or 5-8°C higher than the melting point of the fat phase.
- The emulsion is crystallized according to the flow diagram below.
- Table margarine is stored at refrigerator temperature.
Typical Quality Deficiencies
We recommend the following changes in processing if the below mentioned quality deficiencies occur during or after processing:

Too Hard at the Wrapping Machine
- Cool more intensively in the first cooling section and/or less intensively in the last cooling section of the SSHE.
- Increase the rotation speed in the pin rotor machine.
- Ensure proper water circulation in the jacket of the pin rotor machine.

Brittle
- As described above.
- Increase the total volume of kneading units, i.e. pin rotor machine.

Grainy (Small Rice-Like Grains)
- Increase the remelt temperature of the return product.
- Ensure proper pasteurization profile.
- Cool less intensively in the first cooling section of the SSHE.

Lumpy (Lumps of Different Sizes)
- Increase the rotation speed in the pin rotor machine.
- Ensure proper crystallization in the first cooling section of the SSHE.
- Ensure proper water circulation in the jacket of the pin rotor machine.

Greasy or Too Soft at the Filling or Wrapping Machine
- Decrease the rotation speed in the pin rotor machine and/or decrease the residence time in the kneading unit(s).
- Cool less intensively in the first cooling section of the SSHE and/or more intensively in the second cooling section of the SSHE.

Oily Appearance or Too Shiny Surface
- Decrease the rotation speed in the pin rotor machine and/or decrease the residence time in the kneading unit(s).