

Spreadable processed cheese

with Cremosal and Syrofos blends



Fosfa offers a wide range of blends suitable for use throughout the Dairy. These blends have many important functions both in the final product and during processing. Cheese systems vary a lot (e.g. age of cheese, fat and moisture content, type of cheese) and the same applies to the requirements on final products. Cremosal and Syrofos blends are designed to help you to get just what you want!

Functions of our blends:

- Melting of processed cheese
- pH modification
- Improvement of final product appearance
- Improvement of texture development
- Emulsification of free fat
- Minimization of syneresis
- Bacteriostatic effect

Benefits of final product with our blends:

- Smooth texture
- Excellent spreading properties
- Improved product stability



Depending on both the raw material that you are using and final product you want to get, we offer several blends for spreadable processed cheese. It does not matter, whether you want your product suitable for portions, tubes, or plastic cups, we can offer you just the right blend.

	pH (1% solution)	pH shift	Ion exchange	Creaming effect
Cremosal ST14	8.7 – 9.3	+0.1/+0.3	medium	medium
Cremosal TMB2	8.6 – 9.6	+0.1/+0.3	strong	weak
Syrofos D	8.7 – 9.3	+0.1/+0.3	medium	weak
Syrofos F20	8.6 – 9.2	+0.3/+0.5	weak	strong
Syrofos F28	6.4 – 7.0	-0.1 /-0.3	medium	medium
Syrofos FC-22	7.7 – 8.3	0.0/+0.1	medium	medium
Syrofos F81	9.7 – 10.3	+0.3/+0.5	medium	none

Dosage

The dosage of our blends is calculated according to the nature of the raw material and also according to the properties of desired processed cheese. Generally speaking, the concentration of added phosphate blends ranges from 1 – 3 %.

Recipes for spreadable processed cheese developed by our R&D team.

Example of Recipe	
Cheese (young)	20.0 %
Cheese (mature)	15.0 %
Butter	24.1 %
Skimmed milk powder	6.2 %
NaCl	0.1%
Syrofos F28	1.5 %
Water	to 100.0 %



Parameters of final product	
Dry matter	45.0 – 50.0 %
Fat in dry matter	55.0 – 60.0 %

Process:

- Add all ingredients into the cooker
- Heat up to 85 °C at 750 rpm
- Increase speed up to 900 for 2 minutes
- Adjust pH at least up to 5.8

Example of Recipe	
Butter	27.0 – 30.0 %
Skimmed milk powder	7.0 – 9.0 %
Rennet casein	3.0 – 6.0 %
Starch	3.0 – 5.0 %
NaCl	0.1 – 0.3 %
Syrofos FC-22	1.6 %
Water	to 100.0 %

Parameters of final product	
Dry matter	42.0 – 45.0 %
Fat in dry matter	55.0 – 60.0 %

Process:

- Add all ingredients into the cooker
- Heat up to 75 °C at 750 rpm
- Increase speed up to 1500 and process for approx. 5 minutes
- Adjust pH to be near 6.0 and process another 2 minutes

Our recommendation:

For better taste, we recommend to use 5 to 10 % of mature cheese



If you need any **pH adjustment**, you can use Syrofos M or Cremosal AKS1 to easily achieve what you want!

	pH (1% solution)	pH shift	Ion exchange	Creaming effect
Syrofos M	4.1 – 5.0	-0.4/-0.5	weak	none
Cremosal AKS1	11.5 – 12.5	+1.0/+1.5	none	none



We deliver to our customers all over the world. The capabilities provided by our in-house R&D team allow us to adapt our products to unique customer requirements and changing market needs.

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