

Fat-Based Fillings with MASEMUL® EC 5401 Blend

MASEMUL® EC 5401 is an integrated blend of fat and emulsifier to improve crystallization for fat-based fillings

Features of MASEMUL® EC 5401

- Suitable for fat-based confectionery fillings including shortening for wafer fillings and biscuits creams.
- Promotes nucleation onset and consequently speed up crystallization of fat.

Formulation Considerations while Using MASEMUL® EC 5401

- Recommended dosage: 2.5% (calculated in fat phase).
- Dosage levels vary depending on the customer's specific requirements.

Advantages of Using MASEMUL® EC 5401

- Improve production throughput especially when cooling tunnel conditions are not ideal.
- Troubleshoot issues related to slip due to poor or slow setting of the cream filling.
- Minimal impact of solid fat content and sensory.

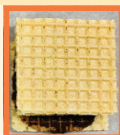
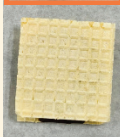


Outcome and Results

Slip test on wafer cream fillings (cooling at 15°C and 10°C)

Boxed in orange = wafer not slip

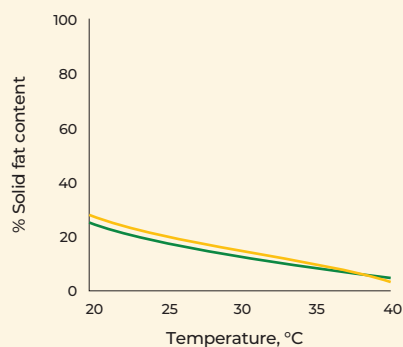
Product / time (min) at 15°C	7	9	11	13	15	25
Control with Goldshort 36 - 39						
+ 2.5% MASEMUL® EC 5401						

Product / time (min) at 10°C	5	6	7	8	9	15
Control with Goldshort 36 - 39						
+ 2.5% MASEMUL® EC 5401						

- MASEMUL® EC 5401 at small dosage is effective to promote crystallization and setting of the fat-based filling.
- The setting of the chocolate cream based on shortening is significantly faster (almost half the time faster) when such crystallizer is added.
- This can prevent slip of the wafer sheet especially when cooling time in tunnel is shorter

Impact on solid fat content of shortening:

% Solid fat content of shortening with and without added MASEMUL® EC 5401



- Palm shortening is commonly used as filling fats for wafer filling and biscuit cream.
- Addition of 2.5% crystallizer has small impact on solid fat content of shortening (in this case Goldshort 36 – 39 with melting point of 36 – 39°C).
- Hence little or insignificant impact on sensory and texture of the cream filling.

Disclaimer:

The information contained herein is to our best knowledge true and accurate, but all recommendations or suggestions are made without guarantee since we can neither anticipate or control the different conditions under which this information and our products are used.

Email: fp@icofgroup.com

www.musimmas.com