



MASEMUL® EC 5001, EC 5002, OB 1015

For Improved Stability Against Oil Separation in Fat-based Spreads

Oil separation is an issue faced by many sweet spread producers especially when spreads are sold at a variety of storage conditions.

An ideal spread should have a creamy, light consistency without oil separation throughout its shelf-life of 6-12 months.

Emulsifier is frequently added to vegetable oil as binder to prevent separation.



Features of MASEMUL® EC 5001, EC 5002, OB 1015

- Excellent stability against oil separation.
- Consistent texture and good spread-ability.
- High surface gloss, no formation of large crystals on surface.

Formulation Considerations while Using MASEMUL® EC 5001, EC 5002, OB 1015

- Suitable for variety of spreads with various fat contents.
- Recommended dosage:
 1. MASEMUL® EC 5001, EC 5002: 1.5 – 2.0% (fat phase)
 2. MASEMUL® OB 1015 : - Chocolate spread: 2.0 – 3.0% (fat phase)
- Tahini spread: 4.0 – 5.0% (fat phase)
- Dosage levels vary depending on the customer's specific requirements.

Advantages of Using MASEMUL® EC 5001, EC 5002, OB 1015

1. Ensures stabilization of liquid oil in spread in fluctuating temperatures.
2. Suitable for spreads with high amount of liquid oil such as chocolate/nut spreads, peanut butter, tahini and other confectionery spreads.
3. No crystals formation over storage test conditions.
4. Enhances the surface gloss of spreads.

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Key difference between MASEMUL® EC 5001, EC 5002, OB 1015

Product range MASEMUL® for stability against oil separation

Product Code	Hydrogenated	Clean label	Origin	Cooling after filling	Stability ¹
MASEMUL® EC 5001	Yes	No	Palm	Optional	■ ■ ■ ■ ■
MASEMUL® EC 5002	Yes	Yes	Palm	Recommended	■ ■ ■ ■ ■
MASEMUL® OB 1015	No	Yes	Palm	Required	■ ■ ■ ■ ■

Remark 1 : Stability against oil separation



Excellent stability, no or very low risk of oiling out
Good stability, Slight risk of oiling out
Moderate stability, some risk of oiling out



Less stable, high risk of oiling out
Unstable, severe oiling out

Outcome and Results

Application: Chocolate spread

Spreadability, Texture and Glossiness

	Control	2.0% MASEMUL® EC 5001	2.0% MASEMUL® EC 5002	2.0% MASEMUL® OB 1015
				
Spreadability	Too soft to spread	Good	Good	Good
Texture	Very soft	Soft	Soft	Soft
Appearance	Oil separation	Glossy	Very glossy	Very glossy

Application in Tahini spread

After 6 months storage at cyclic condition (22°C 8 hrs, 31°C 16 hrs).

	Control	2.0% MASEMUL® EC 5001	4.0% MASEMUL® OB 1015	5.0% MASEMUL® OB 1015
				
Cooling after filling	No	No	Yes	Yes
Oil separation	Severe	No	Very slight	No

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.

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