Product Information Brochure ADWIL XPERT LMG (E471)

| oc. No. | AWL_ATC_Oleoemulsifier_05 30/12/2023 | |
|---------------|--------------------------------------|--|
| reation date | | |
| ev. date | NA | |
| ev. no. | Y2023-00 | |
| ssue date | 31/12/2023 | |
| ffactive data | 01/01/2024 | |



Adwil Xpert LMG

Product Type: A blend of mono-, di- and triglycerides based on natural vegetable oil. An all-vegetable, trans-free and non-GMO fully hydrogenated triglycerides. ADWIL XPERT LMG has crystallizing properties, special oil-binding properties and effect on emulsion stabilization.

USES

- Controls Oil separation (de-oiling/oil exudation) with minimum dosage
- Easy to use, to be dissolved in the fat base
- Can be used in Chocospread,
 peanut butter applications

BENEFITS

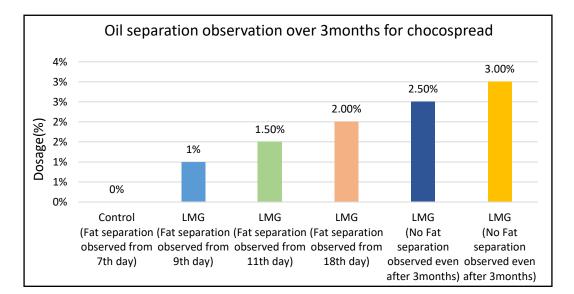
- Visible results in yield stress reduction thereby increasing machineability
- Addresses oil separation in chocospread and peanut butter
- Do not impact sensorial properties
- No restricted use limitations

| Typical Specification | | |
|-----------------------|-------------------------------|--|
| Color & Appearance | Creamish white powder/ flakes | |
| Melting Point | 53 - 63°C | |
| Acid Value | 3 Max | |
| Mono Content | 10 - 13 | |
| lodine Value | 2 Max | |
| Free Glycerin | 1 Max | |
| HLB | 4.4 | |



Efficacy Data

AWL Adwil Xpert LMG_ was tested with different dosage in chocospread application. After 3months of the trial's observations were noted for all the samples along with control. Excellent results were obtained at 2.5% dosage to address separation.



Efficacy Data

Chocospread Application



| SAMPLES | LMG DOSAGE | VISCOSITY DATA AT 40°C (Pa s) (VISCO METER) | YEILD STRESS (Pa) |
|---|------------|---|-------------------|
| Control (Without LMG) | STD | 2.613 | 22.25 |
| 1% 1.5% Chocospread 2.5% 3% | 1% | 1.8594 | 8.016 |
| | 1.5% | 1.6904 | 6.2176 |
| | 2% | 1.4434 | 4.3675 |
| | 2.5% | 1.5490 | 5.9803 |
| | 3% | 2.391 | 2.455 |





STD(Control)- Large amount of oil Separation observed





2% LMG- Oil Separation observed



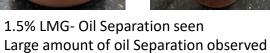
1% LMG- Oil Separation seen Large amount of oil Separation observed





2.5% LMG- No Oil Separation observed









3% LMG- No Oil Separation observed

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