

TECHNICAL DATA SHEET

Lipo-QUEST BG

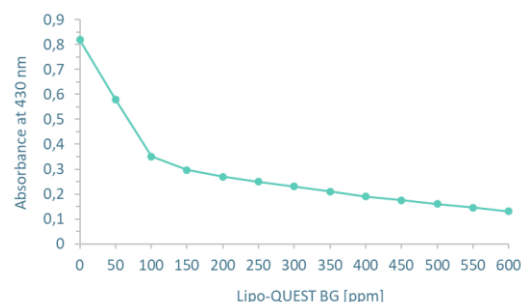
INCI Butylene glycol, Lauric acid,
lauryl alcohol diphosphonic acid

CAS 16610-63-2 / 143-07-7 / 107-88-0



SPECIFICATIONS

Appearance	Liquid
Dry matter (%)	5 min.
Density (g/cm ³ at 20°C)	0.91 – 0.95



GENERAL INFORMATION

Lipo-QUEST BG is a unique oil-soluble chelating agent. It is ideally suited for incorporation into solid body care formulations, applicable in both rinse-off and leave-on products. This agent offers an effective solution to prevent rancidity, as well as issues such as softening, browning, cracking, and discoloration that are caused by metal ions.

Moreover, Lipo-QUEST BG enhances foaming and cleansing properties.

Test results demonstrate that Lipo-QUEST BG exhibits a particular selectivity towards problematic transition metals, such as copper (Cu) and iron (Fe), in contrast to calcium (Ca) and magnesium (Mg).

In the presence of high-stress conditions (Fe³⁺, air, and elevated temperatures), the inclusion of 0.1% Lipo-QUEST BG is sufficient to reduce oxidative degradation by over 50%.

Furthermore, the incorporation of 0.4% Lipo-QUEST BG decreases the oxidative activity of iron ions by more than 80%.

Test: Soybean oil at 90°C in contact with air flow rate 10 L/h. Intentional addition of 5 ppm of Fe³⁺.

FORMULATION AND RECOMMENDATIONS

Lipo-QUEST BG can be incorporated at any stage of the process within the lipidic phase. It effectively combats premature rancidity of fats, even when subjected to repeated heating. The versatility of Lipo-QUEST BG renders it highly functional for both oil-in-water (O/W) and water-in-oil (W/O) emulsions.

Lipo-QUEST BG can be utilized to extend the shelf life of raw materials. It is also suitable for incorporation into fragrances and essential oils to prevent oxidation, as well as in anhydrous formulations.

Recommended concentration

0.1% - 1.0 %

BENEFITS

Lipo-QUEST BG can be utilized in oils and anhydrous formulations to provide protection against oxidation and inhibit the formation of undesirable odors.

When incorporated into fragrances, it safeguards against fading, thereby enhancing the longevity of the scent.

Additionally, when added to emulsions, Lipo-QUEST BG improves the stability of lipophilic ingredients, including vitamins, essential oils, UV filters, and fatty acids.

APPLICATIONS

Cosmetics

- Skin Care
- Sun Care
- Makeup
- Toiletries
- Baby Care

SHELF LIFE

24 months under proper storage conditions

REGULATORY

NOI (ISO 16128)	0.87
Halal	Approved
Kosher	Approved