



OLIVEM[®] 2020 G

Naturally derived cold process emulsifier for energy-efficient operations

HALLSTAR 

OLIVEM[®] 2020 G

Olivem[®] 2020 G is a next-generation, naturally derived cold process emulsifier offering excellent performance, natural dermollient functionality and superior sensoriality. Drawing from Hallstar's deep expertise in olive oil chemistry, Olivem[®] 2020 G has a unique composition of fatty acids similar to the lipidic composition of the hydrolipidic film of the skin and the ability to preserve liquid crystals structures. As our clinical test demonstrates, these biomimetic properties sustain skin hydration. Olivem[®] 2020 G allows preparation of formulations without the added heat or high shear mixing usually required to create oil-in-water emulsions. Ideal for a range of applications including face, eye and body care, sun care, make up, men's grooming, color cosmetics and hair care.



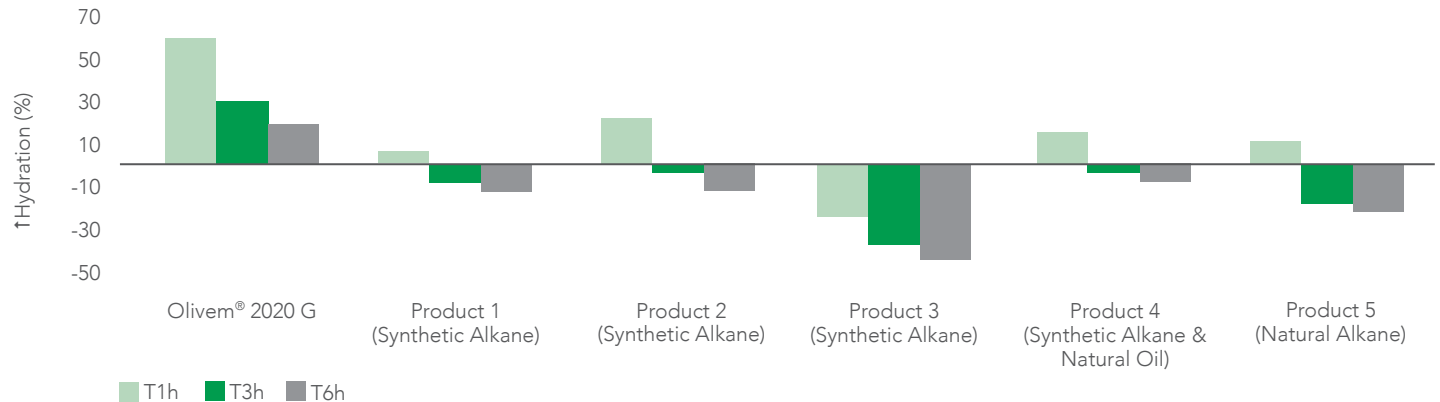
TECHNICAL DATA

- INCI: Ethylhexyl Olivate (and) Sodium Acrylates Copolymer (and) Polyglyceryl-4 Oleate
- Aspect: Viscous yellow liquid
- pH 2% in water @ 25°C±2°C: 5.5-7.5
- Viscosity 2% in water (Brookfield DV-E, s6, 25°C±2°C, 20 rpm): 10000-30000 mPa.s

HYDRATION DATA

Graphic demonstrates that Olivem[®] 2020 G provides a hydration benefit to the skin that is dramatically superior to the other products.

Olivem[®] 2020 G Skin Hydration Compared to Market Alternatives



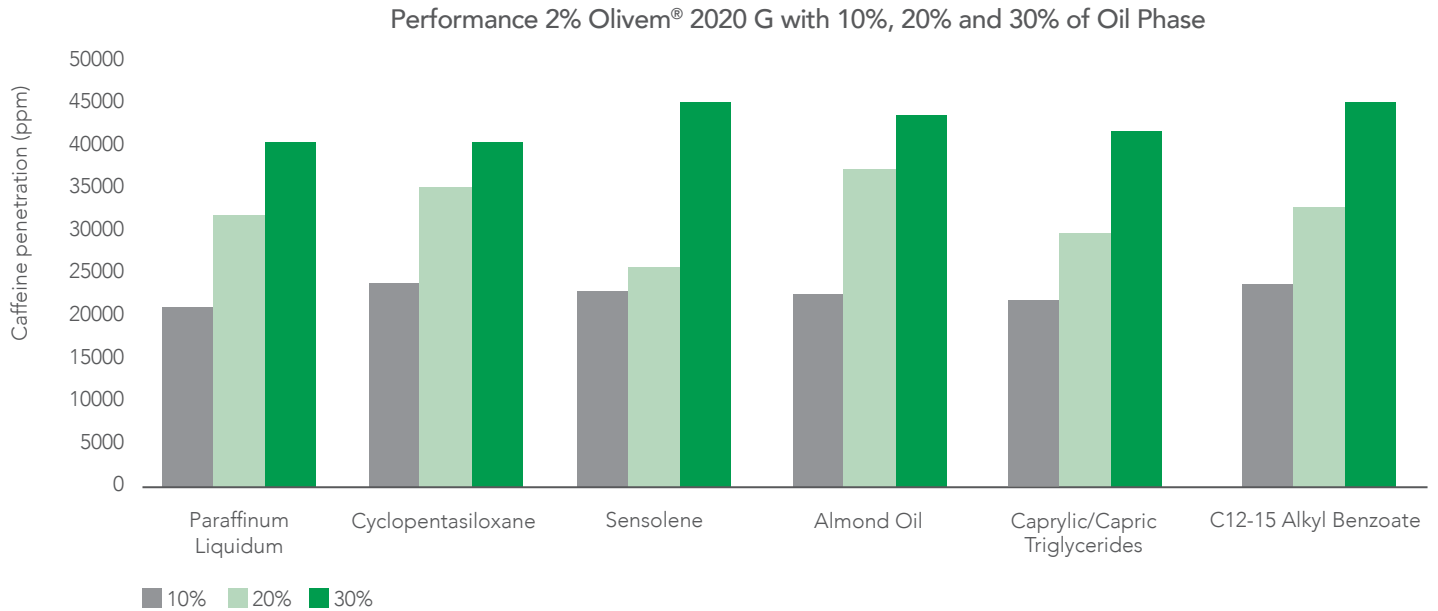
All statistical differences are at least significant

Thanks to the fatty acids from olive oil, Olivem[®] 2020 G is a functional ingredient that gives a superior skin benefit when compared to market alternatives with a non-biomimetic oil phase. The clinical test was developed with 12 volunteers, and the skin hydration was measured by MoistureMeterSC[®]—Delfin. The measurements were taken prior to the product's application (T0 – baseline) and then 1h (T1h), 3h (T3h) and 6h (T6h) after the product's application. The graphic shows the difference of T0 and successive times for each formulation. The applied statistical criteria is the two-tailed, student test for unpaired data.

QUICK FACTS

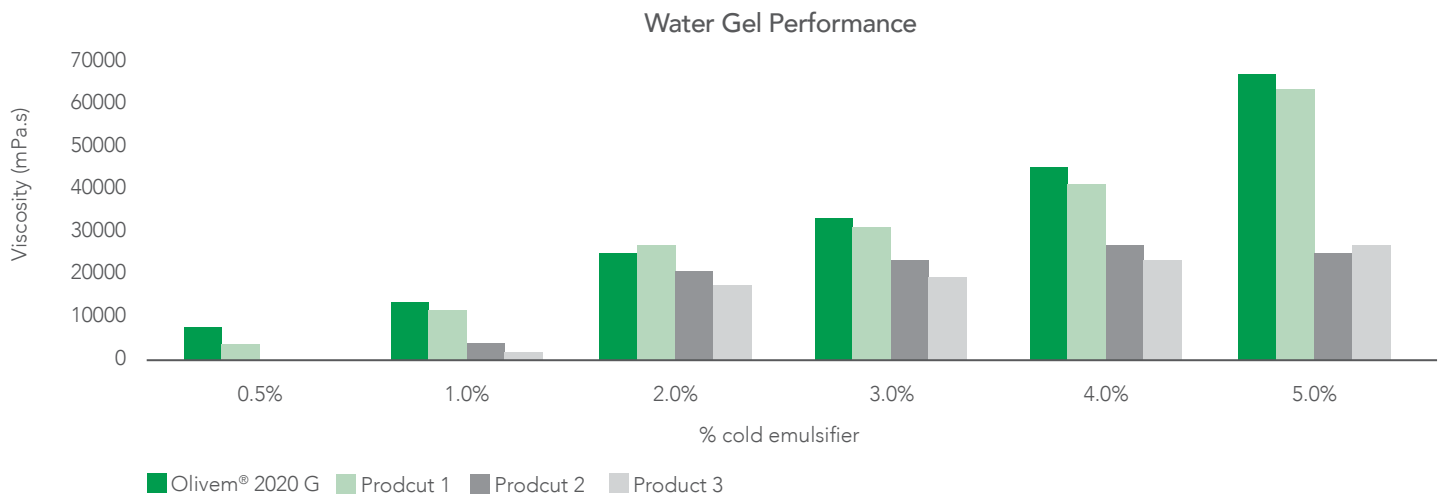
- Global regulatory compliance
- Excellent emulsification performance
- Biomimetic olive oil-derived ingredient
- Superior sensoriality and hydration, compared with other cold process emulsifiers
- Environmentally friendly—no added heat or pressure and contains over 60% naturally-derived ingredients according to ISO 16128

VERSATILE EMULSIFIER FOR OIL PHASES



Olivem® 2020 G can emulsify very different types of oil, from apolar hydrocarbons to silicones, esters, natural oils and triglycerides to polar esters. It can also emulsify up to 30% of the oil phase with only 2% of the ingredient to create rich and nourishing textures. Olivem® 2020 G can be added in any phase and at any time in the formulation development process.

EFFICIENT VISCOSITY BUILDING FOR WATER GELS

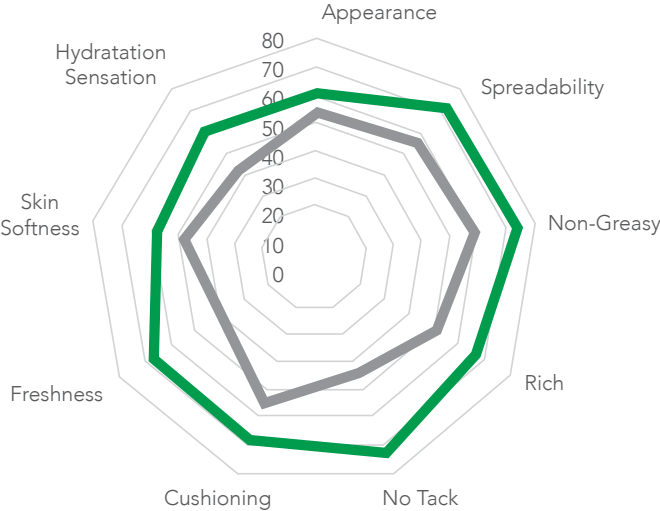


Olivem® 2020 G can build water gels very efficiently compared to market alternatives while giving naturality and enhanced benefits for skin.

LET'S WORK WONDERS®

OLIVEM® 2020 G

SENSORY DATA



■ Olivem® 2020 G ■ Product 1

Olivem® 2020 G was compared to a market alternative using an untrained panel for various sensorial parameters. This chart shows a superior appreciation on all parameters tested, with freshness, cushioning, hydration and lack of tackiness as the most noticeable differences.