

BIORENUVA

EMULSIFICATION

In the pursuit of natural, sustainable, and effective ingredients for today's diverse and eco-conscious market, biolipids emerge as a groundbreaking solution, including in the realm of oil emulsification. Derived from the fermentation process of yeast, sugar and oil biolipids offer a biodegradable, extremely mild alternative to conventional synthetic emulsifiers. Their unique molecular structure allows them to excel in blending a wide array of oils ensuring uniformity, stability, and enhanced performance in various applications

Their unique molecular structure and blend of acid and lactone forms allows biolipids to effectively reduce surface tension between immiscible liquids, facilitating the formation of stable emulsions in wide range of emulsions, from water-in-oil (W/O) to oil-in-water (O/W) types.

| TRADE NAME | INCI NAME | USAGE (WT%) | | | | | | | | | | | |
|------------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | /1 | /2 | /3 | /4 | /5 | /6 | /7 | /8 | /9 | /10 | /11 | /12 |
| Deionized Water | Deionized Water | 68.50 | 48.50 | 43.30 | 68.30 | 68.30 | 43.30 | 68.30 | 42.67 | 68.30 | 43.30 | 68.30 | 43.30 |
| Potassium Hydroxide | Potassium Hydroxide | - | - | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.43 | 0.30 | 0.30 | 0.30 | 0.30 |
| Glycerin | Glycerin | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Keltrol CG-T | Xanthan Gum | 0.50 | 0.50 | - | - | - | - | - | 0.30 | - | - | - | - |
| Carbopol Ultrez 20 | Acrylates/C10-30 Alky Acrylate Crosspolymer | - | - | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.60 | 0.40 | 0.40 | 0.40 | 0.40 |
| Diocide | Phenoxyethanol, Caprylyl Glycol, Hexylene Glycol | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| ReNuva™ SL-L70 | Glycolipids | 5.00 | 5.00 | 10.00 | 5.00 | - | - | - | - | 5.00 | 10.00 | 5.00 | 10.00 |
| ReNuva™ SL-A70 | Glycolipids | - | - | - | - | 5.00 | 10.00 | 5.00 | 10.00 | - | - | - | - |
| Capric/Caprylic Triglyceride | Capric/Caprylic Triglyceride | - | - | - | - | 20.00 | 40.00 | - | - | 20.00 | 40.00 | - | - |
| Isononyl Isononanoate | Isononyl Isononanoate | - | - | - | - | - | - | 20.00 | 40.00 | - | - | 20.00 | 40.00 |
| Luxtra Pure | C32-54 Isoalkane | 20.00 | 40.00 | 40.00 | 20.00 | - | - | - | - | - | - | - | - |
| | | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| | pH | 5.27 | 5.36 | 6.31 | 6.76 | | | | | | | | |
| | Viscosity (cps)* | 8,904 | 12,810 | 30,462 | 14,372 | | | | | | | | |

*Brookfield LVDVII+, 6 rpm, 1 min, Helipath On