

**P1**

## A Robust Solution to make Stable Oil Dispersions : Geronol Odessa

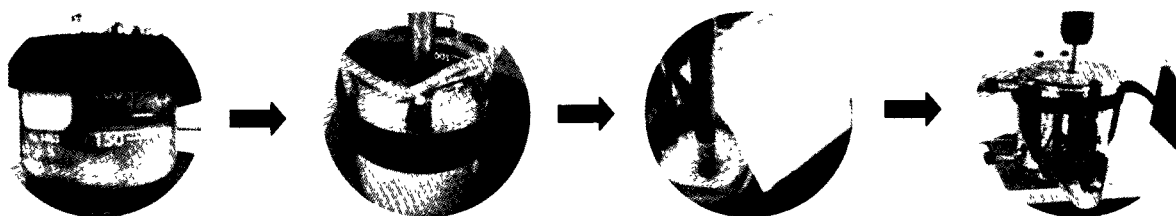
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New trend in the Agrochemicals industry consists to develop Oil Dispersion (OD's) based on vegetable oils or modified seed oils. This new type of formulation exhibits numerous benefits in comparison to traditional ones as follows: possible use of water sensitive active ingredients, better compatibility of actives ingredients mixtures, increase of bio-efficacy when compared to SC's, safe and eco-friendly solvent system. However, the OD's market remains rather small due to the instability of the formulations during the storage. Indeed, phase separations are the main dramatic shortcomings of oil-based dispersions.

Unlike well-known technologies such as aqueous suspension concentrates (SCs), for which scientists have extensive experience in formulation practices resulting in readily available technologies for developing a stable formulation, OD is a relatively new technology. Technical knowledge for developing a stable OD formulation is still an area that needs significant investigation.

This paper describes the use of proprietary blend which improve the stability and the emulsification of OD's based on different vegetable oils and methylated seed oils. Geronol Odessa contains all ingredients needed to formulate the OD except the ai's and the oil adjustment. The blend based on the emulsifier system, the part of the oil, the dispersing agent, the rheological additives and the activator is the All In One Solution and was developed taking into account two major criteria's: formulation and process. Some examples with nicosulfuron 40 g/l, tebuconazole 160 g/l, chlorsulfuron 40 g/l, uniconazole 50 g/l, flufenoxuron 50 g/l, indoxacarb 150 g/l OD's formulations are disclosed in the presentation.

In comparison to the OD's benchmark, the Geronol Odessa range demonstrates its superiority in terms of formulation stability, emulsification and performance. In addition, the use of such pre-blend reduces the raw materials inventories, facilitates the OD scale up and manufacturing by using standard milling equipment.



OD Formulation made easy

1. Blend: Odessa + Oil + Active Ingredient
2. Mill: to the right particle
3. Pack: that's it