



PARAdigmOX™

PATENT PENDING

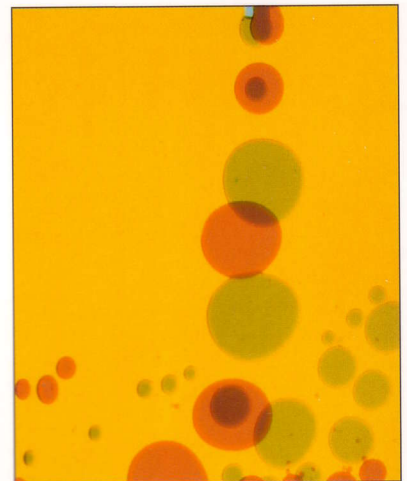
Polar Paradox

The "polar paradox" is a well known paradigm in antioxidant research. This paradigm is based on the observation that polar antioxidants are very efficient in stabilizing bulk oils and fats. Polar antioxidants will concentrate on the oil / air interface, which is the area where the oxygen can penetrate and where the oxidation process will start. Because of the accumulation of polar antioxidants in this area, the oxidation process is prevented.

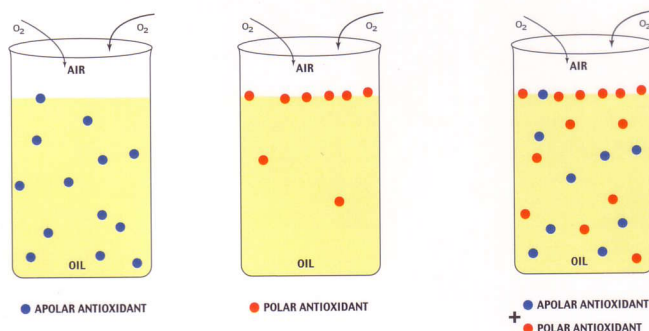
In feed applications the situation is more complex: fats and oils are present in a heterogeneous matrix, partly in emulsion status. Therefore a combination of polar and apolar antioxidants is needed to get optimal protection.

The Technology

The uniqueness of **PARAdigmOX** antioxidant nutraceuticals is the introduction of stable liquid antioxidant formulations that contain both polar and apolar antioxidants. In conventional solvent systems these are considered to be incompatible. The **PARAdigmOX** technology deals with this incompatibility by introducing a revolutionary ternary solvent system resulting in protection against the oxidation process from all possible angles: in the oil and at the interface.



A combination of polar and apolar antioxidants is needed to get optimal protection of feeds.



Conventional antioxidant formulation

PARAdigmOX™