

O – Essent

Natural essential oil microemulsion from **Oregano**, micro-particle is much better absorbed to target organ as natural alternative to antibiotics for animal.



Enhance the immune system

Augment good condition of gut

Antioxidant & Anti-inflammatory

Antimicrobial – Antiprotozoal – Antifungal

Composition

Oregano oil	5.0 %
Carvacrol	70.0 %
Thymol	2.0 %
Linaloon	3.3 %

NET CONTENT 1 LITER



Anti-protozoa infection e.g. *Ichthyophthirius* sp., *Argulus* and *Tricodina*

Prevention of pathogenic bacterial infection e.g. *Streptococcus* sp., *Aeromonas* sp., *Flavobacterium* sp. OR *Vibrio* sp.



White Feces Syndrome prevention

Help disinfection in Artemia



Prevent from Avian influenza and respiratory diseases

Coccidiosis, *Salmonella* sp. and *E. coli* prevention



*Recommended dose please follow the label

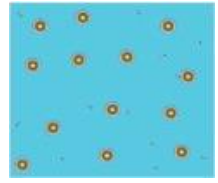
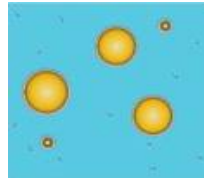
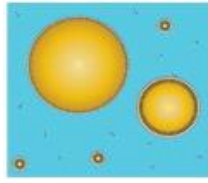


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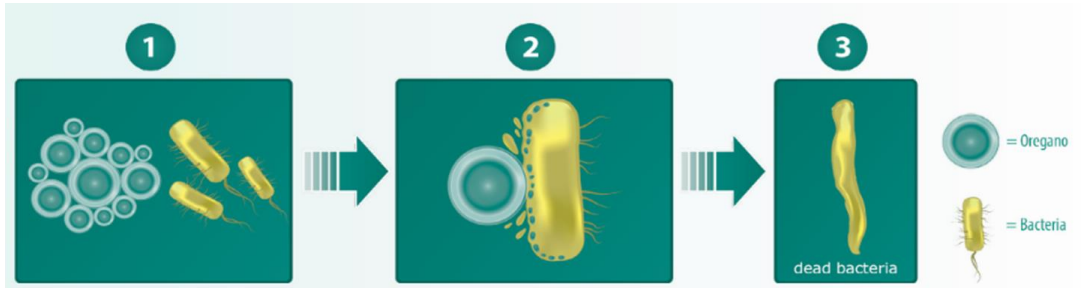
O – Essent



Particle size

Status	Emulsion	Nanoemulsion	Microemulsion
Appearance	Turbid	Clear	Clear
Particle size	0.1 – 100 µm	50 – 1000 nm	10 – 100 nm
Viscosity	High	low	low
Stability	Unstable	Unstable	Stable and long shelf life

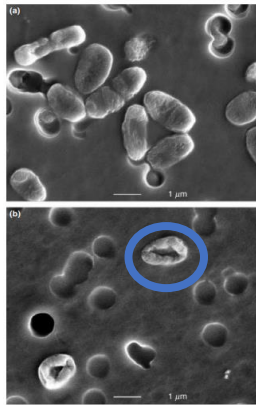
Mode of action



O-Essent VS Bacteria

O-Essent contact with bacterial wall

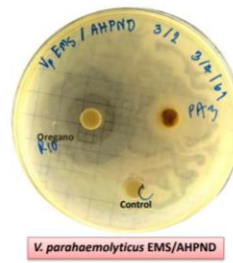
Bacterial death



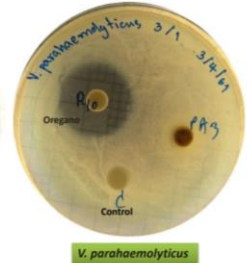
Control

Cells damaged after treatment with Oregano oil

(Burt et al. 2002)



V. parahaemolyticus EMS/AHPND



V. parahaemolyticus

	Qualification	Recommended dosage
Broodstock	Reduce bacteria and protozoa in water cause of pathogenic bacterial infection	20 – 30 ml/ton of water after exchange water
Post larvae	Reduce bacteria infection in hepatopancreas and gut, enhance immunity, EMS protection and white feces protection.	-Topcoat diet with O-Essent 5 ml/kg feed 4 times/day -Feed 4 times/day for 5 days before harvest or transportation
Washing artemia	Reduce bacteria in artemia from transferring in larvae shrimp or fish	Rinse artemia with O-Essent 80 ml/ 1 kg rinse artemia with clean water again before feed larvae
Transportation	Reduce and control bacteria in water during transportation	50 ml/ton of water in packing water
Poultry	Laying Hens Broiler	Reduce stress, Coccidiosis, <i>Salmonella</i> sp. and <i>E. coli</i> prevention
Pig	Piglet Sow-gestation and lactation	0.3 – 0.6 ml / 1 kg feed 0.6 – 0.8 ml / 1 kg feed 0.6 – 0.9 ml / 1 kg feed 0.8 – 0.9 ml / 1 kg feed



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