

Borregaard LignoTech is one of the world's leading suppliers of high performance additives and ingredients to the animal feed industry.

# High quality fish silage

By-products from farmed species and wild fish are raw materials for fish silage production. Borregaard LignoTech has developed a combination of formic acid and lignosulphonic acid that controls the pH and reduces corrosion.

Both SoftAcid Aqua M and SoftAcid Aqua M+ consist of formic acid and lignosulphonic acid. SoftAcid Aqua M+ also contains an additional anti-oxidant (ethoxyquin), in order to maintain the quality of the oil and protein in the silage.

Lignosulphonic acid is a natural antioxidant and gives an extra protection against degradation of the fish silage. Hence, SoftAcid Aqua M+ improves the quality of the fish silage by preserving the fish by-products from oxidation.

## **Brands**

• SoftAcid Aqua M / SoftAcid Aqua M+

## **Benefits**

- Reduced corrosion rate
- Stronger antioxidant effect





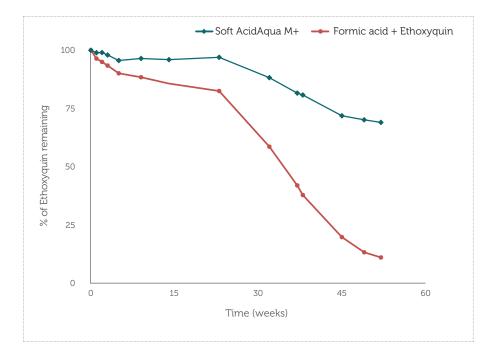




www.lignotechfeed.com

### PERFORMANCE OF SOFTACID

Degradation rate of ethoxyquin with and without lignosulphonic acid (LS) in formic acid.



Large scale trial: 1000 litre containers stored outside exposed to all kinds of weather conditions. Sampling started in October 2010. The results are measured by HPLC. Note: Slow degradation of ethoxyquin during winter period due to very cold weather. Laboratory trials have also been performed (at 20-25°C), supporting the above mentioned results. The stability trials all show that lignosulphic acid has a stabilising effect upon ethoxyquin.

#### ENVIRONMENTAL ADVANTAGES OF SOFTACID

Significantly less corrosion with SoftAcid Aqua M on carbon steel.

