



# STABILIZING AQUASOL® FENBENDAZOLE IN LIVESTOCK DRINKING WATER.

**VAC-PAC®** and **safe-guard®** AquaSol

## THE IDEAL SOLUTION

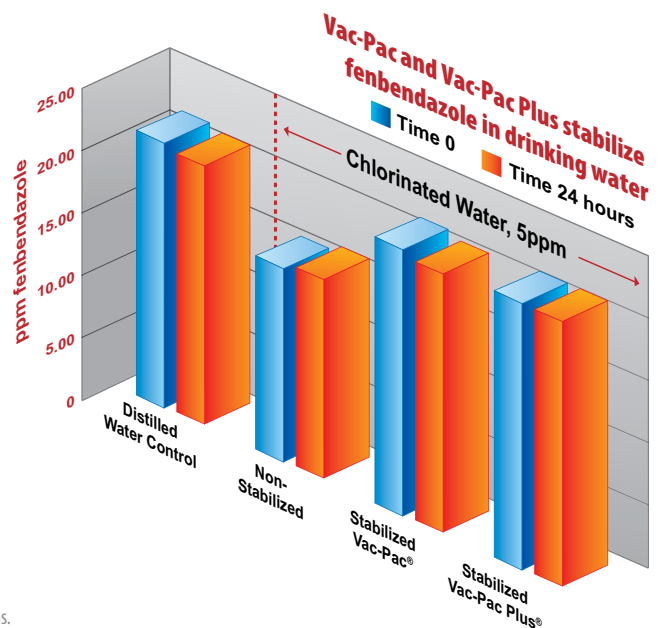
Safe-guard AquaSol®, the popular livestock wormer from Merck Animal Health<sup>1</sup>, is designed for use in the drinking water for all classes of swine, except suckling piglets. The active ingredient, fenbendazole, is well-established for treating and controlling numerous types of worms. The licensed dose regimen relies on providing 2.2 mg of fenbendazole active ingredient per kg of body weight daily for 3 consecutive days. Fenbendazole, however, can be unstable in some water supplies, raising the prospect that pigs drinking treated water will receive a lower-than-intended dose due to decay of the active ingredient. Research reported by Merck veterinarians<sup>2</sup> at the 48th Annual Meeting of the AASV verified that the fenbendazole activity in AquaSol is immediately degraded by chlorinated drinking water. The study also reported that this decay risk, which will contribute to under-dosing the wormer, is eliminated by stabilizing the chlorinated water with Vac-Pac® or Vac-Pac Plus®,<sup>3</sup> two potent water stabilizers commonly used to improve water quality and prolong the activity of live vaccines in drinking water containing chlorine and other oxidizers including iron compounds and nitrate.



The Merck study compared the stability of 20ppm Safe-guard AquaSol in chlorinated water, with either no stabilizer, or stabilized with Vac-Pac or Vac-Pac Plus® mixed to label directions. The solutions were tested to determine the fenbendazole dose immediately when mixed, and again after 24 hours to compare the stability in each solution.

The graphed results illustrate the immediate fenbendazole decay, during which the active ingredient lost at least 25% potency immediately upon mixing. Conversely, both stabilizers completely prevented any activity loss, both upon mixing and after being held for 24 hours in the chlorinated drinking water.

The study reported by Merck confirms the Vac-Pac® family of water stabilizers are ideal solutions to reduce the negative risks chlorine poses to proper fenbendazole dosing, reducing the likelihood of animals receiving an inadequate dose in the drinking water.



<sup>1</sup>Aquasol® is a registered trademark of Merck Animal Health, Madison, NJ, USA.

<sup>2</sup>Fleck, R. and J. Slightom (2017). Presented at the 48th Annual Meeting of the American Association of Swine Veterinarians.

<sup>3</sup>Vac-Pac® and Vac-Pac Plus® are registered trademarks of Animal Science Products, Inc., Nacogdoches, TX, USA.