

Underlining the importance of clean drinking water

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A recent study by Dutch drinking water hygiene specialists Intracare reveals that drinking water is one of the major sources of many common infections like E. coli, salmonella and campylobacter. Because birds take in twice as much water as feed, the importance of good quality drinking water cannot be emphasised enough.

Cleaner and disinfectant

With this in mind, Intracare has developed Intra Hydrocare, a cleaner and disinfectant that cleans and disinfects the entire drinking water system quickly and easily.

It was recently awarded full biocide registration by the Dutch Board for the Authorisation of Plant Protection Products and Biocides (CTGB).

Intra Hydrocare has been registered in more than 60 countries worldwide over the past few years. The product was previously registered with the CTGB for PT2 (public and medical use) and PT4 (food and animal feeds) use only, but its registration has recently been extended.

The new PT3 registration (veterinary use) makes Intra Hydrocare the best registered product in its field. This is a unique situation, because it makes it the first product in the world that can be used safely and officially in all sectors.

Tests

Intracare tests hundreds of water samples from the drinking systems of various national and international poultry farms every year. Of the 237 samples tested between August 2009 and June 2010, 47% contained pathogenic micro-organisms which could have a major impact on the

health of the birds. These test results are confirmed by Dutch Animal Health, who estimate that 22% of all the water samples they analyse are 'unfit for drinking'.

These figures stand in sharp contrast to the attention that livestock farmers pay to the quality of their drinking water.

This should not be the case, given that drinking water is one of the main sources of infectious diseases in animals. This 'invisible' source of infection is often underestimated in practice, even though it is easy to tackle.

Poultry farmers often incorrectly assume that the quality of their drinking water is satisfactory because they use chlorine or acids on a regular basis.

It is true that chlorine and some acids are capable of killing micro-organisms in the drinking system. As long as you keep adding enough chlorine or acids there will be nothing to worry about.

But it is only when the concentration drops – for example when medicines, vaccines or liquid food supplements that do not tolerate being mixed with chlorine and acids are provided via the drinking water – that problems can arise. In addition, we have observed that the dead matter arising from the use of acid and chlorine attaches itself to the inside surfaces of the drinking system. It is not removed, so it forms a biofilm.

Dual action

This biofilm provides the ideal breeding ground for micro-organisms such as bacteria (E. coli, salmonella) and moulds. Even with further applications of chlorine and acids, the biofilm protects these fast growing bacteria, with all the consequences this brings, when the animals drink from the drinking system. Intra Hydrocare has a dual action: not only does it remove the biofilm, it also kills all the micro-organisms present.

The effect of the product is based mainly on the production of dioxy-



gen. One litre of Intra Hydrocare produces 200 litres of dioxygen, which breaks up the biofilm into very small elements which are disinfected and can pass out of the drinking water system unhindered.

Removing the biofilm eliminates a major risk factor in the drinking system, which has many benefits in practice: fewer infections, better water and feed intake; in other words, a better operating result.

Wider CTGB authorisation

Intracare has received full biocide registration from the CTGB for Intra Hydrocare, and is the only supplier to have achieved this.

This means that official tests for this authorisation (performed by organisations including TNO) have shown that the product not only cleans but also officially disinfects.

The CTGB is usually only responsible for Dutch registrations. But we are seeing more and more countries outside the Netherlands following CTGB guidelines, which makes it much easier to register the product in these countries.

Intra Hydrocare is registered for PT2 (public and medical use), PT3 (veterinary use) and PT4 (food and animal feeds).

It can be used in all applications, and that is a huge step forward. We are the only supplier to offer three registrations in one product. This is enormous value added for poultry farmers.

They can rest assured that in Intra Hydrocare they have a product that is extremely effective and 100% safe for their animals, their equipment and of course themselves.

Wageningen based CTGB is the body that authorises plant protection products and biocides in the Netherlands. All biocides are subject to stringent periodic inspection. Intra Hydrocare was inspected at the end of 2009. Prior to that, Hydrocare was registered for PT2 and PT4 use.

A TNO study has shown that the product is also extremely effective against micro-organisms that are found in the veterinary sector (PT3 use). Partly because of the results of this study, the CTGB concluded that Intra Hydrocare is suitable for PT3 use.

Poultry farmers can check which registrations have been granted by visiting www.ctgb.nl.

