

# **African Swine Fever Prevention & Control**

### **Advanced Biosecurity**

African Swine Fever (ASF) is extremely dangerous due to its highly contagious characteristics, ability to be easily spread via a variety of vectors, high morbidity and mortality rates, and extreme resilience to withstand high and low temperatures. Add to this the fact that there is currently no effective treatment or vaccine available, and it is easy to understand why global pig producers fear this disease.

#### Stopping the spread of ASF infection.

Biosecurity is the only real way of stopping the spread of ASF. It will reduce the impact on affected farms and will be a key to clinical recovery and virus elimination, especially on larger farms. Producers need to achieve the highest possible levels of biosecurity, leveraged by good buy-in and compliance from management, their staff and their suppliers.

ASF is very good at 'Hitching a ride' so it spreads easily. A high proportion of spread will be by pig transport, and so is the first target of biosecurity. However, there are many other means of spread. All other transport is a risk, from feed to dead-haul, to service vehicles, to manure removal. Perhaps the next biggest risk is from transmission via contact with wild boar. People can also be vectors, via their

clothes, on their boots and equipment, or any inanimate objects they may bring onto the unit.

The virus may persist in uncooked meat products and swill for several months, and therefore could be transmitted via contaminated pig feed,

or meat products ingested. Aerial spread has been demonstrated, but only over short distances and is unlikely to be a major factor.



#### Effective swine biosecurity tools.

Some of the most important tools for effective biosecurity are the LANXESS Biosolve® heavy-duty detergents and Virkon® disinfectants for use in ASF disease prevention and control cleaning and disinfection protocols.

Washing with water alone is not sufficient to reduce the amount of organic burden left after dry procedure. Therefore, thorough washing of all surfaces, equipment and vehicles with a Biosolve® heavy-duty detergent is essential to achieve the best results from any subsequent disinfection procedure.

#### Choosing the right biosecurity disinfectant.

The choice of disinfectant is vital. It needs to be active against the ASF virus but also have a broad spectrum of activity against other pig pathogens.

LANXESS Virkon® S and
Virkon® LSP have broad
spectrum activity against
swine disease-causing organisms
and are both independently proven
effective against the ASF virus.



The efficacy testing for Virkon® S and Virkon® LSP was undertaken by the Centre for Animal Health Research (CISA) Spain, May 2019, in accordance with EN 14675 (modified to enable testing against ASFv).

Disinfectant	Virus	Test Method	Dilution Rate	Contact Time (mins)
Virkon® S	ASFv	UK Ref lab method EN 14675 (modified)	1:800 1:500 1:200 1:100	30 5 30 seconds 15 seconds
Virkon® LSP	ASFv	EN 14675 (modified)	1:100 1:200 1:400	10 1 1

The test method employed included the presence of high organic soiling, hard water and was conducted at low temperatures (4°C and 10°C), and at short contact times, to simulate real world 'on-farm' conditions.

## Without the correct protocols and procedures in place, biosecurity will fail.

With vehicles being the number one horizontal vector through which ASF is spread, providing well equipped vehicle cleaning and disinfection areas is essential. Good vehicle washes must allow manure removal, provide good cleaning and subsequent disinfection, and vitally prevent cross contamination. The provision of drying and heating for trucks after cleaning and disinfection is an advantage, but does not replace it.

Other examples of good biosecurity tools are disinfectant arc sprays made available on approach to farms, dedicated feed and equipment delivery bays to keep trucks away from pig sheds and becoming a possible vector of transmission, external washes to disinfect where trucks have been, remote dead pig collection, and good entry facilities such as showers and/or a Danish entry system.

Disinfectant boot dips should be placed at every site access point and at the entrances to all livestock houses and barns.

Evaporator cooling cell pad biosecurity disinfection should be another key factor for consideration. Adding

Virkon® S disinfectant solution to the water reservoir recirculation tanks provides a constant flow of disinfectant solution over the pads. This helps to reduce the possibility of infection being introduced into a building via aerial transmission on dust particles.



Additionally, Virkon® S can be sprayed in the presence of animals at a dilution rate of 1:200, enabling daily continuous disinfection of pig nursery units, farrowing and finishing houses at times of heightened disease risk, such as the threat of ASF.

#### Virkon® Disinfectant ASF Biosecurity Applications

Disinfectant Application	Surface	Equipment	Aerial			Water Continuous	Vehicles	Wheel Dips	Boot Dips	Skin
» Virkon <sup>®</sup> S	•	•	•	•	•	•	•	•	•	•
» Virkon <sup>•</sup> LSP	•	•						•	•	

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The specified uses and registered claims for the product may vary from country to country. Please contact LANXESS to verify country-specific approved uses.

Use biocides safely. Always read the label and product information before use.



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