

Sorgene® Xtra

The tried and tested broad-spectrum disinfectant for the best livestock hygiene and farm biosecurity.



BASF Pest Control Solutions

- Top quality, stabilised peracetic acid and hydrogen peroxide blend
- DEFRA approved (Foot and Mouth Disease Orders, Poultry Orders, Swine vesicular disease Orders, General Orders)
- For first class cluster, lambing, building, equipment and vehicle hygiene
- Rapid, consistent disinfection even with severe soiling
- Biodegradable, no need to rinse and easy to use

Enabling the most effective solutions to your pest problems.



We create chemistry

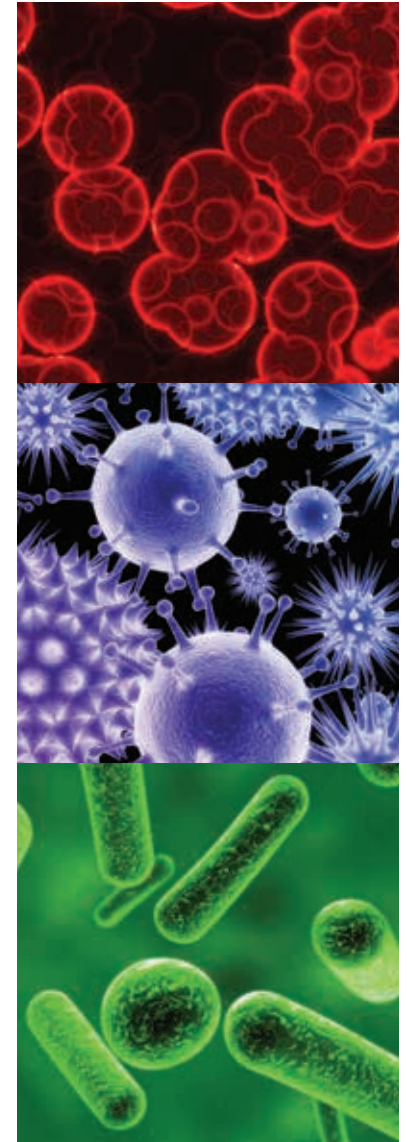
Micro-organisms (bacteria, viruses, algae, fungi and protozoa) are very diverse in form and widespread in the environment. They are the cause of many diseases and hygiene problems in the animal health industry, from animal husbandry and associated food production, to the keeping of domestic and sporting livestock.

The modern use of more intensive farming techniques and increased transportation of livestock has heightened the potential for disease transmission and epidemics.

Disinfection is one of the means by which these problems can be controlled and has a number of aims:

- Control of epidemic diseases that could seriously damage the industry.
- To reduce the microbial load in the animals' environment and hence the potential for disease.
- To improve the general health and welfare of animals.
- To remove or reduce the chance of pathogenic infection of food in the production process.

Prevention is better than cure and therefore good husbandry programmes which include thorough washing and disinfection of housing are essential. New crops of animals entering the building will then be exposed to a minimum disease risk rather than a very high risk if housing is not disinfected.



Sorgene® Xtra is a very powerful broad spectrum environmental disinfectant for the control of disease-causing micro-organisms such as viruses, bacteria, fungi and fungal spores of commercial importance. Its unique advanced formulation is based upon a stabilised blend of peracetic acid and hydrogen peroxide.

Sorgene® Xtra is non-staining and non-tainting. **Sorgene® Xtra** can make a considerable contribution to disease prevention and improved production.



- DEFRA approved (Foot-and-mouth disease, Swine vesicular disease, Poultry diseases including avian influenza, influenza of avian origin in mammals, Newcastle disease, paramyxovirus, General orders)
- Highly effective in any animal housing situation.
- Rapid action and quick results. All buildings and housing can be re-stocked soon after use.
- Kills bacteria, viruses and fungi which cause major diseases of economic importance.
- Kills Ringworm spores in buildings.
- Maintains excellent performance even in the presence of severe soiling.
- Biodegradable – breaks down after use into environmentally acceptable products and leaves no residues so no rinsing is necessary.
- Low toxicity in use.
- Non-corrosive in use to spraying equipment and surfaces.
- Versatile - easy to apply by knapsack sprayer, power washer or other conventional spraying or fogging equipment.
- Readily mixes in both cold and hot water.
- Stabilised product – long shelf life.
- Cost-effective to use – 1:200 general dilution rate.

User rates and approximate coverage:

Dilution Rate	Volume Product	Volume Water	Approximate Amount of Solution	Approximate Coverage	
				m ²	ft ²
1:75	1 litre (2 Pints)	75 litres (18.5 Gallons)	76 litres (17 Gallons)	150 m ²	1500 ft ²
1:100	1 litre (2 Pints)	100 litres (25 Gallons)	101 litres (23 Gallons)	200 m ²	2000 ft ²
1:200	1 litre (2 Pints)	200 litres (50 Gallons)	201 litres (48 Gallons)	400 m ²	4000 ft ²

5 litres of solution covers 10 m²

As with all BASF brands, quality is assured and this is backed-up by product support and technical advice.

Disease can spread as easily as muck on a busy farm. An effective biosecurity routine, using **Sorgene® Xtra**, can prevent the spread of infection to cattle, sheep, pigs and poultry. Disinfection is a vital means of ensuring sources of infection brought from outside the farm on both people and vehicles do not present a risk.



Foot Dips

Intensive livestock housing should have a foot dip for personnel's boots to be dipped in prior to entering the house. Foot dips can be made up using **Sorgene® Xtra** at the rate of 1:100. Ideally these should be changed on a daily basis.

Vehicle Washing

Vehicles coming on to a farm should be disinfected before entry to prevent the spread of disease. Remove as much gross soiling as possible and soak all the surfaces with detergent, rinsing afterwards with clean, cold water via a pressure washer at high pressure. The exterior of the vehicle, including wheels and wheel arches, should then be sprayed with **Sorgene® Xtra** at a dilution rate of 1:100 to the point of run-off and surfaces should remain wet for 20 minutes. By law all vehicles that transport animals should be disinfected prior to the animals being loaded and after the animals have been unloaded.

Good hygiene practice should include the disinfecting of feed vehicles prior to entry to the farm to help prevent the spread of disease from farm to farm.

Sorgene® Xtra can also be used to disinfect the inside of trailers and vehicles:

- Remove as much gross soiling as possible and soak all surfaces with detergent.
- Apply **Sorgene® Xtra** to the inside of the trailer/vehicle either by fogging or by using a power washer or knapsack sprayer. If using a power washer or knapsack application, apply at 1:100 to the point of run-off and surfaces should remain wet for 20 minutes. When fogging, **Sorgene® Xtra** should be diluted at a rate of 1:20. On completion of fogging, the trailer/vehicle should be sealed for a further 30 minutes and then ventilated for another 30 minutes before re-entering.
- Allow the inside to dry thoroughly before loading.

Dilution rates:

Rates of use	Dilution rate
General disinfection:	
All accommodation areas, machinery, feeding equipment	1:250
Transport, tractors	1:100
Wheel dips, foot dips (change according to use)	1:100



UK farmers lose more than £100 million a year to mastitis. Dipping or flushing the cluster between milkings with **Sorgene®Xtra** reduces mastitis by controlling its spread from cow to cow and it does not taint milk because it contains no phenols.

The cluster is one of the biggest contributors to the spread of bacteria between cows. Cluster dipping or flushing can play a vital role in reducing the spread of mastitis during milking. In practice it has been shown to reduce cell counts by 200,000 cells/ml over two years. Make **Sorgene®Xtra** a part of your milking routine.

BASF Cleaning and Disinfection Programme for all types of Cattle Accommodation.

- Remove dung, straw and shavings etc.
- Soak all surfaces of the housing with a solution of detergent.
- Leave for 15-20 minutes to penetrate soiling.
- Wash surfaces with clean cold water via a pressure washer.
- Spray a solution of **Sorgene®Xtra** at a dilution of 1:100.
- Surfaces should be treated to the point of run off of the solution and should remain wet for at least 1 hour.
- Re-straw or put in fresh shavings.
- Housing may be restocked immediately

Weekly Routine:

1. Remove all dung and soiled straw from the rear half of the cubicle.
2. Apply a solution of **Sorgene®Xtra** at a dilution of 1:100 via a knapsack sprayer or watering can. (Apply half a litre of solution to the rear of the cubicle).
3. Re-straw – Can be used on mats, sand and sawdust. Cubicles can be restocked immediately.

Cubicle Hygiene:

Housing cattle during the winter can bring you the problem of increased mastitis. Use **Sorgene®Xtra** regularly on cubicle bedding and this risk can be minimised.



Cluster Dipping

Every year Mastitis costs UK farmers over £100 million. Mastitis is the inflammation of the udder caused by bacteria, which invade the udder, multiply and produce toxins that are harmful to the udder. 90-95% of all mastitis cases are caused by micro-organisms invading the udder via the teat end. **Sorgene®Xtra** should play a vital role in every good livestock hygiene plan as it helps breaks the cycle of the disease by putting a barrier between the infection and the next cow. It helps prevent cross contamination and reduce the risk of spreading the disease through the herd.

Sorgene® Xtra is proven to kill all three major contagious parlour mastitis causing bacteria:

- *Staphylococcus aureus*
- *Streptococcus agalactiae*
- *Streptococcus dysgalactiae*

Cluster Dipping is a very simple process and will not add more than a few minutes to the milking routine. It's much less time consuming and far cheaper than treating a case of mastitis.

To obtain the full benefit of Sorgene®Xtra it should be used as follows:

- Fill 2 buckets, 1 with water and 1 with a 1:400* solution of **Sorgene®Xtra**.
- Dip cluster after removing from cow in the bucket of water to remove organic matter.
- Then dip cluster several times in the **Sorgene®Xtra** solution.
- Shake off the excess solution from the cluster and fit to next cow.
- Change content of buckets after every 25 cows.
- Or alternatively use a hand-held sprayer: Make up a solution of **Sorgene®Xtra** at a dilution rate of 1:400*. Spray each liner until run-off. Shake before fitting the liner on the cow.

*If Mastitis is present, use at the rate of 1:200.

Ringworm.

Ringworm is one of the most common skin diseases in cattle, especially growing cattle and calves. It is caused by infection with a fungus that lives on the skin. The environment is the major source of infective fungi. Effective control of ringworm will only occur if the environment is properly cleaned and disinfected. This must be done between each batch of calves. Follow the BASF Cleaning and Disinfectant Programme for all types of Cattle Accommodation, using a dilution rate of 1:200, before the cattle are brought into the building.

User rates and approximate coverage:							
	Specific Disease Control	General Hygiene	Fogging	Foot Dips	Vehicle Spraying	Drinking Lines	Mastitis Control
Cattle					1:100		
Cattle Sheds	1:100	1:250		1:100		1:400	
Calving Boxes	1:100	1:250		1:100			
Cubicles/Yards	1:100	1:250		1:100			1:100
Cluster Dipping	1:200	1:400					1:200
Calf Pens	1:200	1:250		1:100			



The lambing shed is an ideal environment for breeding bacteria. You can protect against unnecessary lambing loss with **Sorgene®Xtra**.

First class hygiene at lambing is one of the simplest and most economic ways of reducing the number of lambs lost. With one third of all lamb losses in lowland flocks occurring during the neonatal period and a good proportion of these resulting from disease, the best possible protection against infections at this critical time is **Sorgene®Xtra**.

BASF Cleaning and Disinfection Programme for all types of Sheep Accommodation.

- Remove dung, straw and shavings etc.
- Soak all surfaces of the housing with a solution of detergent. Leave for 15-20 minutes to penetrate soiling.
- Wash surfaces with clean cold water via a pressure washer.
- Spray a solution of **Sorgene®Xtra** at a dilution of 1:200. Surfaces should be treated to the point of run off of the solution and should remain wet for at least 1 hour.
- Re-straw or put in fresh shavings.
- Time pressures during lambing do not always allow for complete cleaning of pens between lambings. **Sorgene®Xtra** can be used after removal of gross soiling. Spray pens at 1:100 and re-straw.
- Pens may be restocked immediately.



Sorgene®Xtra is ideal for use in the lambing sheds and its low odour in use reduces the chances of mis-mothering during indoor lambing.

Furthermore, spraying of buildings, feeding and water troughs at 1:100 will help control Orf in sheep. It is also effective against Watery Mouth (*E.coli*), Lamb Dysentery and Joint Ill at 1:100.

Sorgene®Xtra-Point Lambing Hygiene Checklist:

Maintain your vital defence against unnecessary lamb losses this season despite the pressures of lambing with our simple checklist for first class hygiene to counter the major disease challenges facing your newborn lambs.

1. Thoroughly disinfect all accommodation before the start of lambing, pressure washing the sides and floors of the pens, preferably with a good quality detergent before spraying them with a 1:200 solution of **Sorgene®Xtra** broad spectrum disinfectant.
2. Isolate sick ewes and lambs in specially-prepared pens well away from the healthy flock and tend them last to minimise cross-infection dangers.
3. Wear clean overalls, dip boots in a 1:100 solution of **Sorgene®Xtra** before entering the shed and wash hands with bactericidal soap before and after examining ewes and lambs or assisting with lambing.
4. Keep a bucket of 1:100 solution of **Sorgene®Xtra** on hand at all times to routinely disinfect all lambing equipment, water bowls, teats and milk dispensers, refreshing it regularly.
5. Muck out pens frequently, replenish them with fresh bedding generously and disinfect exposed surfaces with a 1:100 solution of **Sorgene®Xtra** using a knapsack or hand-held sprayer, at least daily.



Dilution rates:

	Specific Disease Control	General Hygiene	Fogging	Foot Dips	Vehicle Spraying	Drinking Lines	Mastitis Control
Sheep					1:100		
Indoor Lambing	1:100	1:250		1:100			



Poultry farms are wide open to bacterial, fungal and viral diseases such as salmonella and gumboro. **Sorgene®Xtra** can help prevent the entry and spread of diseases in your flock. **Sorgene®Xtra** has been approved as a disinfectant for disease prevention including diseases of poultry orders in the proportion of 1 part **Sorgene®Xtra** to 100 parts of water.



Sorgene®Xtra is ideal for use in broiler and breeder houses, hatcheries and laying units. It is very effective for water sanitisation and as a fogging agent for terminal disinfection. It is also available in 200 litre drums to suit the needs of the larger scale production units.



Dilution rates:								
	Specific Disease Control	General Hygiene	Fogging	Egg Dipping	Foot Dips	Vehicle Spraying	Drinking Lines	Crate Washing
Poultry	1:100							
Broiler	1:100	1:250	1:20		1:100		1:400	1:200
Breeder	1:100	1:250	1:20	1:300	1:100		1:400	1:200
Hatchery	1:100	1:250	1:20		1:100		1:400	1:200
Egg Production	1:100	1:250			1:100		1:400	1:200

BASF Cleaning and Disinfection Programme for all types of Poultry Housing.

Cleaning:

- Remove all litter. Use compressed air and/or brush to dislodge dust on beams and fittings. Blow and/or brush floor. This is especially important on earth floors. (Wear suitable respiratory protection).
- Sanitise drinker lines with a suitable detergent. Leave in system for at least 12 hours and then flush with clean water.
- Switch off power supply.
- Thoroughly soak all surfaces of the house with a detergent solution paying particular attention to air inlets, fan boxes, posts, drinkers, feeders and control room. This can be applied through a pressure-washer at low pressure 600-700 psi (40 – 50 bar). Apply enough solution to ensure surfaces remain wet for 15-20 minutes to penetrate soiling before washing off.
- Wash surfaces with clean cold water via a pressure washer at high pressure to remove soiling before disinfection.

Disinfecting:

- Spray a solution of **Sorgene®Xtra** at low pressure 600-700 psi (40-50 bar) on all surfaces to the point of run-off.
- Wash and disinfect aprons and roadways.
- Add litter and set up equipment. Ensure personnel entering the unit have clean clothing and boots.
- Fill foot dips with **Sorgene®Xtra**.
- Thermal fog using **Sorgene®Xtra**.
- Ensure the house is sealed for 1 hour post-fogging.

The house may be re-stocked 30 minutes after ventilation.

Egg Sanitisation:

- Egg Dipping – **Sorgene®Xtra** can be used for egg dipping at a dilution of 1:300. Eggs should be immersed in the solution at a temperature of 41°C and removed to drain.
- Egg Fumigation – **Sorgene®Xtra** can be used at 1:20 for the fumigation of eggs.
- Egg Spraying – Eggs can be sprayed with **Sorgene®Xtra** at a dilution of 1:100 and left to dry. In the UK, ADAS trials showed **Sorgene®Xtra** had no toxic effect on the eggs. Using the regimes listed above fertility and hatchability were not affected.

In the UK, the use of detergents and disinfectants is only permitted for eggs used for hatching.





Modern pig production units of any type are vulnerable to disease and, in situations where stock levels are high, the opportunity for disease to spread between animals is greatly increased.

Animals, humans, food, water and the housing itself are all vectors through which disease can be spread and the importance of good biosecurity and effective disinfection play a vital role in disease control.

Sorgene®Xtra is key to preventing disease in farrowing houses, weaner pens and fattening houses. It is effective against Blue Ear (PRRS) at 1:100 and recommended for the control of Trycophyton, the cause of Ringworm in pigs, at 1:100.

BASF Cleaning and Disinfection Programme for all types of Pig Accommodation.

- Remove dung, straw and shavings etc.
- Soak all surfaces of the housing with a solution of detergent. Leave for 15-20 minutes to penetrate soiling.
- Wash surfaces with clean cold water via a pressure washer.
- Spray a solution of **Sorgene®Xtra** at a dilution of 1:100 if SMEDI is a problem, otherwise 1:200 is adequate. Surfaces should be treated to the point of run off of the solution and should remain wet for at least 1 hour.
- Re-straw or put in fresh shavings.
- Pens may be restocked immediately.



Dilution rates:							
	Specific Disease Control	General Hygiene	Fogging	Foot Dips	Vehicle Spraying	Drinking Lines	
Pig					1:100		
Farrowing Houses	1:100	1:250		1:100		1:400	
Weaner Pens	1:100	1:250		1:100		1:400	
Fattening Houses	1:100	1:250		1:100		1:400	
Sow Housing	1:100	1:250		1:100			
Boar Pens	1:100	1:250		1:100			



Sorgene®Xtra can make a considerable contribution to disease prevention and promote healthy conditions in stables, animal boxes, kennels and catteries.

Effective against canine parvovirus, equine flu, herpes, strangles, metritis as well as other viruses and bacterial diseases at a dilution rate of 1:100.

BASF Cleaning and Disinfection Programme for Small Animal Housing and Stables.

- Remove soil from surfaces.
- Where possible wash with a detergent. Allow to soak for 20 minutes.
- Rinse with clean, cold water.
- Disinfect with **Sorgene®Xtra** at 1:100.
- Restraw.
- Animals can be re-housed immediately.
- Washing and disinfecting can be carried out with a knapsack sprayer, power washer or mop and bucket.
- Vehicles used for transporting horses should also be cleaned using the above programme. Drinking bowls and feeding troughs/buckets should also be disinfected in this way.



Dilution rates:							
	Specific Disease Control	General Hygiene	Fogging	Foot Dips	Vehicle Spraying	Drinking Lines	Crate Washing
Small animals					1:100		
Kennels/Catteries	1:100	1:250		1:100			
Horses					1:100		
Breeding	1:100	1:250		1:100			
General	1:100	1:250					

Dilution rates:									
	Specific Disease Control	General Hygiene	Fogging	Egg Dipping	Foot Dips	Vehicle Spraying	Drinking Lines	Crate Washing	Mastitis Control
Poultry						1:100			
Broiler	1:100	1:250	1:20		1:100		1:400	1:200	
Breeder	1:100	1:250	1:20	1:300	1:100		1:400	1:200	
Hatchery	1:100	1:250	1:20		1:100		1:400	1:200	
Egg Production	1:100	1:250			1:100		1:400	1:200	
Pig						1:100			
Farrowing Houses	1:100	1:250			1:100		1:400		
Weaner Pens	1:100	1:250			1:100		1:400		
Fattening Houses	1:100	1:250			1:100		1:400		
Sow Housing	1:100	1:250			1:100				
Boar Pens	1:100	1:250			1:100				
Cattle						1:100			
Cattle Sheds	1:100	1:250			1:100		1:400		
Calving Boxes	1:100	1:250			1:100				
Cubicles/Yards	1:100	1:250			1:100				1:100
Cluster Dipping	1:200	1:400							1:200
Calf Pens	1:200	1:250			1:100				
Sheep						1:100			
Indoor Lambing	1:100	1:250			1:100				
Small animals						1:100			
Kennels/Catteries	1:100	1:250			1:100				
Horses						1:100			
Breeding	1:100	1:250			1:100				
General	1:100	1:250							



Further information, downloads and data sheets can be found at www.pestcontrol.basf.co.uk

Sorgene[®] Xtra

Because Disinfection is better than Infection.



Use biocides safely. Always read the label and product information before use.
Sorgene[®] Xtra contains peracetic acid and hydrogen peroxide.
Sorgene[®] Xtra is a registered trademark of BASF.

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 **BASF**

We create chemistry