

VIROCID



Product description and mode of application

VIROCID is a very concentrated, broad spectrum disinfectant with a synergistic blend of 4 active components. The combination of quaternary ammonium compounds, glutaraldehyde and alcohol ensure efficacy at very low dilutions (0,25—0,50%), at all temperatures. The low dilution makes VIROCID very economical in use. VIROCID always proves its efficacy, in hard water (even in sea water) and in presence of organic matter.

VIROCID has bactericidal, fungicidal, yeasticidal and virucidal capacities and is used as a surface disinfectant for buildings, vehicles and equipment. Despite the powerful disinfecting powers of VIROCID, it is safe for equipment and environment friendly.



VIROCID can be used in different sectors: animal husbandry (poultry, pigs, cattle, ...), aquaculture, food processing, hospitals, animal transport, feed storage(*), horticulture and personal hygiene. (*) Check the registrations in your country.

VIROCID has a long residual action and also offers a wide range of application possibilities. It can be sprayed, fogged, foamed and can be used in boot dips.

VIROCID contains 2 different quaternary ammonium compounds, which generates more synergy and a splendid efficacy in hard water and in presence of organic matter!

VIROCID is composed of:

- Aldehyde:
 - Glutaraldehyde: 107,25 gr/L
- Quaternary ammonium compounds:
 - Single chain type benzalkoniumchloride: 107,60 gr/L
 - Twin chain type dodecyl dimethyl ammonium chloride: 78,0 gr/L
- Alcohol (excipient – non active):
 - Isopropanol: 146,3 gr/L

This means a total of 365 gr/L Quaternary ammonium compounds / glutaraldehyde combination.

VIROCID is the world's number one disinfectant because of its synergistic composition and mode of action:

1. Alcohol removes the lipids from the cell wall
2. Quaternary ammonium compounds penetrate the cell wall
3. Quaternary ammonium compounds 'drag' the glutaraldehyde with them, to 'kill' the nucleus

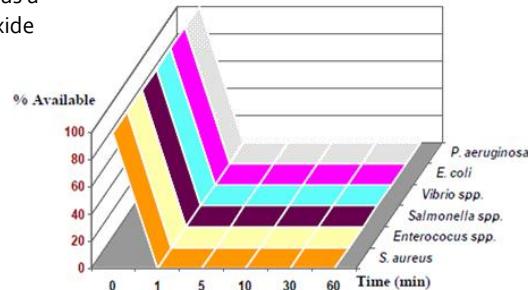


Tips

7 REASONS WHY TO CHOOSE VIROCID:

1. EFFICACY : worldwide tested and proven (EN, DEFRA, AFNOR, EPA, ...)

- Testing reports on bacteria, fungi and yeasts, and viruses (see below).
- Phenol Coefficient: One way to compare disinfectants is to compare how well they do against a known disinfectant and rate them accordingly using the phenol coefficient. The disinfectant to be tested is compared with phenol on a standard microbe (usually *Salmonella typhi* or *Staphylococcus aureus*). Disinfectants that are more effective than phenol have a coefficient greater than 1; those that are less effective have a coefficient less than 1. The phenol coefficient of VIROCID is 13,9, meaning that VIROCID is 13,9 times as effective as phenol products.
- Fast action: VIROCID has a bactericidal activity in 1 minute. This makes VIROCID also suitable for use as a boot dip disinfectant. Compared to peroxide based disinfectants, the better stability in presence of organic matter is one of the advantages why to use VIROCID in boot dips.



- Residual action: VIROCID's remanence allows killing of resistant pathogens such as sporulated germs.

| Tested Microorganisms | Dilutions of disinfectant* (1% organic load) | % micro organisms after contact time (minutes) | | | | |
|-------------------------------|---|--|---|----|----|----|
| | | 1 | 5 | 10 | 30 | 60 |
| <i>Staphylococcus aureus</i> | 1:200 | 0 ! | | | | |
| | 1:400 | 0 ! | | | | |
| <i>Enterococci spp.</i> | 1:200 | 0 ! | | | | |
| | 1:400 | 0 ! | | | | |
| <i>Vibrio spp.</i> | 1:200 | 0 ! | | | | |
| | 1:400 | 0 ! | | | | |
| <i>Pseudomonas aeruginosa</i> | 1:200 | 0 ! | | | | |
| | 1:400 | 0 ! | | | | |
| <i>E. coli</i> | 1:200 | 0 ! | | | | |
| | 1:400 | 0 ! | | | | |

2. SAFETY

Glutaraldehyde and MEL (Maximum Exposure Limit) legislation concerning the protection of the human health and the security of the employees against the risks of chemical agents on the work floor:

- MEL norm for glutaraldehyde = 0,05 ppm with 15 min exposure time.
 - VIROCID sprayed at 0,5 % -> 0,019 ppm
 - VIROCID foamed at 0,5 % -> 0,016 ppm
 - VIROCID fogged at 20 % -> 0,04 ppm

VIROCID complies with the MEL = **SAFE TO USE**. This means that the amount of glutaraldehyde in aerosol is below the Maximum Exposure Limit, to be classified as SAFE TO USE for human.

No personal protection is required, although we still recommend to use PPE: mask, gloves and goggles in any cases.

3. FLEXIBILITY

VIROCID can be applied by foaming, fogging (cold and thermal) or spraying without any addition of additives, in different industries.

Foaming VIROCID gives the best results due to the fact that foam is visible (no forgotten spots), safer (less aerosol in the air) and more effective (foam means longer contact time, thus better efficacy and results).

4. DILUTED COSTPRICE

As VIROCID is the most concentrated disinfectant in the world, the cost price of the in-use dilution is very economical! Never compare price / liter of a product without taking into account the dilution factor!

5. NON CORROSIVE

According to the MSDS of VIROCID the product is classified as toxic, carcinogenic, dangerous and causes burns on the skin. This is only for the concentrated product, not for the ready-to-use solution! Please refer to the MSDS of VIROCID RTU for the safety precautions of VIROCID in application at 0,5%.

On any surface: no corrosion in dilution (neutral pH). VIROCID is safe to use on any kind of material!

| Type of surface | Duration (hours) | Corrosion value (mm/year) |
|-------------------|------------------|---------------------------|
| PU paint | 100 – 300 – 1000 | 0 |
| Copper | 100 – 300 – 1000 | 0,0020 |
| Brass | 100 – 300 – 1000 | 0,0026 |
| Anodized ALU | 100 – 300 – 1000 | 0,0088 |
| ALU crude 7000 | 100 – 300 – 1000 | 0,027 |
| Thermo coated ALU | 100 – 300 – 1000 | 0 |

6. BIODEGRADABILITY

Primary biodegradability of more than 90% after 28 days, according to European Regulation (EC) No.648/2004. Virocid used for disinfection of farm buildings will not affect the activity in biogas installations and won't cause any environmental problems in biological filter ponds.

7. STABILITY

- The dilution of 0,5 % and 1 % is stable in water of 6°, 25° and 40° during 4 weeks.
- The concentrate's shelf life is 3 years, guaranteed under ISO 9001:2008 and GMP certifications.

VIROCID IN THE WORLD

VIROCID is already used in 43 countries (anno 2016). Always check the authorized applications of VIROCID in your country!

**USE OF VIROCID**

For the exact calculation of the required amount of product, see PDS "CALCULATION REQUIRED QUANTITY OF PRODUCT"

- Animal care
 - Animal houses: General use
Always clean thoroughly with a CID LINES detergent such as Kenosan or Biogel. After rinsing and drying, apply VIROCID at 0,25 – 0,5 %.

Different ways of application of VIROCID in empty houses:

| | | |
|---|--|---|
| Spraying or foaming Dilution: 0,25 – 0,5% |  | Fogging 1-L VIROCID + 4L water/ 1000m ³ |
|  | |  |

- Animal husbandry equipment:
Disinfect equipment: 0,25 – 0,5% VIROCID



- Animal transport:
After wash out: Disinfect transport and other equipment:
0,5 – 1% VIROCID. Wheel dips: 1%



- Hatcheries:
Empty rooms, empty hatcher, equipment, offal containers, sanitary rooms,....:
Spraying: 0,25-0,5%
Foaming: 0,25-0,5%
Fogging: 1L VIROCID + 4L water / 1000m³
Misting in setters and hatcher in production (with nozzle): 2% every 30 minutes
Spraying on eggs: VIROCID: max. 0,25% spray on eggs (only where allowed)



- Boot dips:



Agri: 1% VIROCID
Food: 0,5 – 1% VIROCID
Refill 2-3 times/week or when heavily soiled.

- Cooling pads:
VIROCID is EPA approved for algae and slime forming bacteria control in cooling water systems.
Also MUNTERS, a leading manufacturer in air treatment solutions, approved to treat cooling pads with VIROCID.
Prior to start up: 0,33-0,75% VIROCID, foaming or spraying, let it soak for 10 min and rinse. Repeat if necessary.
Initial treatment or shock treatment: 200ml VIROCID per 1000L water, let circulate one day.
Maintenance treatment: 100ml VIROCID per 1000L water, let circulate continuously.



- Aquaculture
For boot dips, equipment, transport, well boats...
Clean thoroughly (e.g. with DM CID-S).
Disinfect with 0,25-0,5% VIROCID or 1,5% if diluted in cold seawater (4°C)



- Food processing (only in countries where allowed)
Food processing and storage rooms
Disinfect : 0,25 – 0,5% VIROCID

- Hospitals

VIROCID can be used for disinfection in hospital or medical environment.
 For disinfection of all materials in hospital or medical environment: use 0,25-0,5%
 Saturate all surfaces with the VIROCID solution by using a coarse spray, sponge or mop.
 Surfaces must remain wet for 10 minutes. Do not use equipment until product have been absorbed or dried.
 Note: do not use as a terminal sterilant on any surface or instrument that is introduced directly into the human body or that comes into contact with mucous membranes.



- Horticulture

Disinfect equipment, floors, walls and use in boot dips VIROCID: 0,25 – 0,5%
 Can only be used in EMPTY greenhouses.

- Personal hygiene

Public institutes: 0,25 – 0,5%
 Disinfecting clothes: add 0,25-0,5% when rinse cycle starts

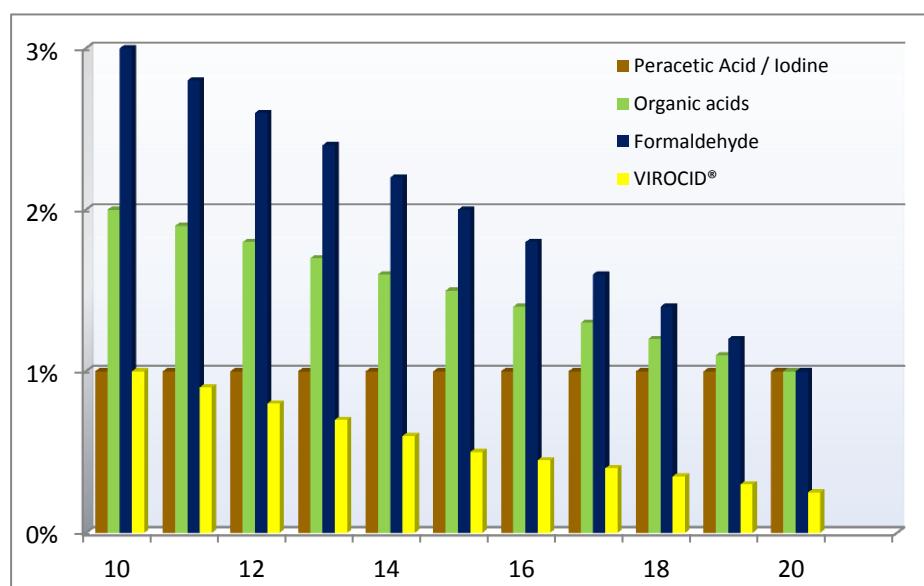
In agricultural applications, rinsing is not required after the disinfection procedure.

Allow the surfaces to dry before bringing in new animals into the buildings. Respect several hours with a good ventilation for drying after disinfection. Pay attention to keep the buildings closed after disinfection, to prevent contamination!

Make sure to clean and disinfect equipment, boots, materials before bringing them back into the building!

THE INFLUENCE OF TEMPERATURE ON THE EFFICACY OF BIOCIDAL ACTIVE SUBSTANCES

- Virocid has an excellent efficacy even at low temperatures.
 Compared to formaldehyde the concentration to be used for an effective disinfection is **4 times** lower!!
 VIROCID is :
 - the most effective disinfectant (all t°)
 - without any corrosion risk (c.q. acids)
 - versatile use (spray, foam, fog)
 - broad spectrum (kills all m-o)
 - ...



- Even at freezing temperatures, VIROCID can be used for disinfection. We advise to add (propylene)glycol as an antifreeze according to the table below:

Preparation: always dilute (propylene)glycol with water first and then add VIROCID at the required rate.

| W% | Vol% | Temperature °C | Temperature °F |
|----|------|----------------|----------------|
| 0 | 0,0 | 0 | 32 |
| 5 | 4,8 | -2 | 28 |
| 10 | 9,6 | -3 | 27 |
| 15 | 14,5 | -5 | 23 |
| 20 | 19,4 | -7 | 19 |
| 25 | 24,4 | -10 | 14 |
| 30 | 29,4 | -13 | 9 |
| 35 | 34,5 | -16 | 3 |
| 40 | 39,6 | -21 | -6 |
| 45 | 44,7 | -27 | -17 |
| 50 | 49,9 | -34 | -29 |
| 55 | 55,0 | -42 | -44 |
| 60 | 60,0 | -51 | -60 |

- 1) Mix (propylene)glycol with water at the concentration appropriate to the temperature from the table.
- 2) Add the disinfectant at the appropriate rate.

E.g.: Use (propylene)glycol at 20% (1 part in 5) for temperatures down to -7°C (19 °F) to water and then add VIROCID at 1 part in 200 (for a 0.5% solution) or 1 part in 400 (for a 0.25 % solution) and stir.

Remark: The addition of antifreeze is only for the prevention that the solution would freeze at temperatures below. Efficacy data are available to proof that Virocid keeps its efficacy even at temperatures below zero and that the surfaces would be disinfected (the micro-organisms would be killed) when the temperature is in positive again!



Article information

| Product group | Biocides | Disinfectants |
|---------------|----------------|-----------------------|
| Registrations | Latvia | Biocidal registration |
| | Lithuania | Biocidal registration |
| | Estonia | Biocidal registration |
| | Hungary | Biocidal registration |
| | Romania | Biocidal registration |
| | Slovakia | Biocidal registration |
| | Czech Republic | Biocidal registration |
| | Switzerland | Biocidal registration |
| | Slovenia | Biocidal registration |
| | Bulgaria | Biocidal registration |
| | Croatia | Biocidal registration |
| | Serbia | Biocidal registration |

| | | | |
|-----|-------|---------------|----------------|
| ADR | Yes | Packing group | III |
| pH | ca. 4 | Density | ca. 1,015 kg/L |

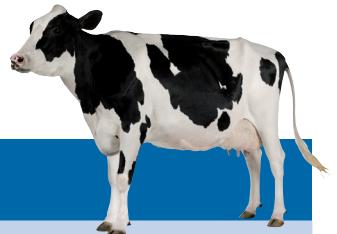
| | |
|--------|--------------------|
| Aspect | Clear brown liquid |
|--------|--------------------|



| Name | Packaging | Order unit | Pallet stacking | Shelf life |
|---------|-----------|------------|-----------------|------------|
| Virocid | 1 L* | 12 x 1 L | 660 x 1 L | 36 months |
| Virocid | 5 L* | 4 x 5 L | 160 x 5 L | 36 months |
| Virocid | 10 L | 1 x 10 L | 75 x 10 L | 36 months |
| Virocid | 20 L | 1 x 20 L | 32 x 20 L | 36 months |
| Virocid | 60 L | 1 x 60 L | 9 x 60 L | 36 months |
| Virocid | 200 L | 1 x 200 L | 4 x 200 L | 36 months |
| Virocid | 600 L* | 1 x 600 L | 1 x 600 L | 36 months |
| Virocid | 1000 L | 1 x 1000 L | 1 x 1000 L | 36 months |

* Articles with an asterix (*) are not standard packagings and subject to special conditions. Ask for more information.

VIROCID IS NUMBER 1 IN THE WORLD !!



Virocid - Dairy

| Bacteria | Norm (Dilution) | Disease |
|---------------------------------------|---|---|
| Bacillus cereus | T72-190 ENG (0.25%), T72-190 NI (0.50%) | Mastitis |
| Clostridium perfringens | EN 1276 (0.50%) | Abomasitis, hemorrhagic enteritis, enterotoxemia, tympania, gas gangrene, sudden death |
| Corynebacterium pseudotuberculosis | AOAC UDT (0.25%) | ventral lymphadenitis (infection of the ventral lymph nodes), abscesses, dermatitis, abortion, mastitis |
| Escherichia coli | EN 1276 (0.25%), NFT 72 301 (0.25%), T72-300 AY (0.25%), T72-300 ED (0.25%), T72-190 ENG (0.25%), T72-190 NI (0.50%), EN 13697 (0.50%), EST (0.25%), AOAC Abu Dhabi (0.25%), ISO 22196:2007 (0.10%), AOAC UDT (0.25%), NFT 72-281 (FOGGING 10%) | Diarrhea, sepsis (blood poisoning), acute mastitis |
| Klebsiella pneumoniae | AOAC UDT (0.25%) | Mastitis |
| Lactobacillus plantarum | NFT 72 301 (0.25%) | Lactic acidosis |
| Listeria monocytogenes | AOAC UDT (0.25%) | Listeriosis : sepsis, placentitis, foetal infection, metritis, abortion, encephalitis (zoonosis) |
| Pasturella multocida | AOAC UDT (0.25%) | Pasteurellosis: pneumonia, skin disease (zoonosis) |
| Proteus mirabilis | EST (0.25%), DVG (0.50%) | Infections of the respiratory, gastrointestinal and genitourinary system, wounds, abscesses, dermatitis |
| Pseudomonas aeruginosa | EN 1040 fr (0.50%), EN 1276 (0.50%), EN 1656 (0.50%), T72-300 AY (0.25%), T72-300 ED (0.25%), T72-190 ENG (0.25%), T72-190 NI (0.50%), AOAC UDT (0.25%), EST (0.25%), CIRLAM SDP+paper (0.50%), CIRLAM SDP(thaw) (1.00%), NFT 72 301 (0.25%), DVG (0.125%), DVG (0.50%), DVG (0.125%), DVG (0.50%), AOAC UdmBasic (0.25%), AOAC Abu Dhabi (0.25%), EN 13697 (0.50%), EN 14349: 2012 (0.50%), NFT 72-281 (FOGGING 10%) | Mastitis, abortion, genital infections |
| Salmonella choleraesuis | AOAC UdmBasic (0.25%), AOAC UDT (0.25%) | Salmonellosis, enteritis, abortion (zoonosis) |
| Salmonella enteritidis | EN 1276 (0.50%), AOAC 960.09 (0.125%), AOAC UDT (0.25%), EN 1656 (0.25%) | Salmonellosis (zoonosis) |
| Salmonella hadar | EN 1656 (0.25%) | Salmonellosis (zoonosis) |
| Salmonella heidelberg | EN 1276 (0.125%), AOAC 960.09 (0.125%) | salmonellosis, abortion (zoonosis) |
| Salmonella infantis | EN 1656 (0.50%) | Salmonellosis (zoonosis) |
| Salmonella typhimurium | EN 1276 (0.125%), EN 1656 (0.25%) | Salmonellosis, enteritis, abortion (zoonosis) |
| Salmonella virchow | EN 1656 (0.25%) | Salmonellosis (zoonosis) |
| Staphylococcus aureus | EN 140 fr (0.50%), EN 1276 (0.25%), EN 1656 (0.50%), T72-300 AY (0.25%), T72-300 ED (0.25%), T72-190 ENG (0.25%), T72-190 NI (0.50%), NFT 72 301 (0.25%), EST (0.25%), AOAC UDT (0.25%), CIRLAM SDP(thaw) (1.00%), CIRLAM SDP+paper (0.50%), DVG Böhm (0.125%), DVG Böse (0.50%), EN 13697 (0.50%), AOAC UdmBasic (0.25%), AOAC Abu Dhabi (0.25%), EN 14349: 2012(0.50%), NFT 72-281 (FOGGING 10%) | Mastitis |
| Staphylococcus hyicus | EN 1656 (0.25%), T72-190 NI (0.50%), EST (0.25%) | Skin infections, often combined with scabies |
| Brucella suis biovar 2 strain CODA13 | AFNOR NFT 72-190 (0.50%) | Brucellosis, abortion (zoonosis) |
| Bacillus anthracis strain RKI03-01640 | AFNOR NFT 72-190 (0.50%) | Antrax (zoonosis) |
| Fungi and yeasts | Norm (Dilution) | Disease |
| Absidia corymbifera | T72-300 (4.00%), NFT 72 301 (0.25%), | Abortion, zygomycosis (infection) |
| Candida albicans | T72-190 NI (0.25%), T72-190 ENG (0.25%), EST (0.50%), DVG (1.00%), DVG (0.50%), DVG (0.25%), EN 13697 (0.50%) | Candidiasis: mastitis, abortion |
| Geotrichum candidum | NFT 72 301 (0.10%) | Geotrichosis: mastitis, abortion, oral, bronchial, pharyngeal and intestinal disorders |
| Trichophyton mentagrophytes | EN 1650 (2.00%), AOAC (0.25%) | Dermatophytosis (ringworm) |
| Viruses | Norm (Dilution) | Disease |
| Foot and mouth disease virus | VIROCID FMD Eng (0.10%), NFT 72-180 (0.50%), Technical file FMD (0.50%), MKZV-FR (0.10%), MKZV (1.00%) | Foot-and-mouth disease (zoonosis) |
| H5N1 Influenza | H5N1 - test China (0.10%), US EPA 40 (0.25%), Use-dilution test AOAC (0.25%) | Avian influenza (zoonosis) |
| Vesicular stomatitis Virus (VSV) | EN 14675 (1.50%) | Vesicular stomatitis (zoonosis) |
| Aujeszky's disease / Pseudorabies | AFNOR (0.25%), AOAC (0.25%) | Aujeszky's diseases/ pseudorabies |
| Reovirus | EK1133 (0.50%), AOAC (0.25%) | Reovirus (gastrointestinal and respiratory system) |
| BVD | EN 14675 (1.00%) | Bovine viral diarrhea |
| Bovine enterovirus | EN 14675 (0.10%) | Bovine enterovirus (abortion, infertility, diarrhea, respiratory infections) |
| Mycoplasma mycoides | EN 1656:2000 (1.00%) | Contagious bovine pleuropneumonia |



Virocid - Pigs

| Bacteria | Norm (Dilution) | Disease |
|---------------------------------------|---|--|
| Brachyspira hyodysenteriae | EN 1276 (0.25%) | Dysentery (inflammation large intestine) |
| Campylobacter jejuni | AOAC UDT (0.25%), EN 1656 (0.25%) | Diarrhea (piglets) |
| Clostridium perfringens | EN 1276 (0.50%) | Sows: sudden death, gangrene Piglets: hemorrhagic diarrhea, necrosis, death |
| Escherichia coli | EN 1276 (0.25%), NFT 72 301 (0.25%), T72-300 AY (0.25%), T72-300 ED (0.25%), T72-190 ENG (0.25%), T72-190 NI (0.50%), EN 13697 (0.50%), EST (0.25%), AOAC Abu Dhabi (0.25%), ISO 22196:2007 (0.10%), AOAC UDT (0.25%), NFT 72-281 (FOGGING 10%) | Diarrhea, mastitis |
| Klebsiella pneumoniae | AOAC UDT (0.25%) | Mastitis, endometritis |
| Listeria monocytogenes | AOAC UDT (0.25%) | Listeriosis: sepsis, pneumonia (zoonosis) |
| Mycoplasma hyopneumoniae | AOAC UDT (0.25%) | Enzootic pneumonia (chronic cough) |
| Pasturella multocida | AOAC UDT (0.25%) | Pasteurellosis: pneumonia (zoonosis) |
| Salmonella choleraesuis | AOAC UdmBasic (0.25%), AOAC UDT (0.25%) | Salmonellosis: pneumonia, hepatitis, cerebral vasculitis (zoonosis) |
| Salmonella enteritidis | EN 1276 (0.50%), AOAC 960.09 (0.125%), AOAC UDT (0.25%), EN 1656 (0.25%) | Salmonellosis (zoonosis) |
| Salmonella hadar | EN 1656 (0.25%) | Salmonellosis (zoonosis) |
| Salmonella heidelberg | EN 1276 (0.125%), AOAC 960.09 (0.125%) | Salmonellosis (zoonosis) |
| Salmonella infantis | EN 1656 (0.50%) | Salmonellosis (zoonosis) |
| Salmonella typhimurium | EN 1276 (0.125%), EN 1656 (0.25%) | Salmonellosis (zoonosis) |
| Salmonella typhisuis | AOAC UDT (0.25%) | Salmonellosis: necrosis, intestinal infections, inflammation of lymph nodes, sepsis (zoonosis) |
| Staphylococcus aureus | EN 140 fr (0.50%), EN 1276 (0.25%), EN 1656 (0.50%), T72-300 AY (0.25%), T72-300 ED (0.25%), T72-190 ENG (0.25%), T72-190 NI (0.50%), NFT 72 301 (0.25%), EST (0.25%), AOAC UDT (0.25%), CIRLAM SDP(thaw) (1.00%), CIRLAM SDP+paper (0.50%), DVG Böhm (0.125%), DVG Böse (0.50%), EN 13697 (0.50%), AOAC UdmBasic (0.25%), AOAC Abu Dhabi (0.25%), EN 14349: 2012 (0.50%), NFT 72-281 (FOGGING 10%) | MRSA (Methicillin resistant Staphylococcus aureus) (zoonosis) |
| Staphylococcus hyicus | EN 1656 (0.25%) | Greasy pig disease, sepsis |
| Streptococcus suis | AOAC UDT (0.25%) | Arthritis, sepsis, meningitis, endocarditis (piglets) |
| Brucella suis biovar 2 strain CODA13 | AFNOR NFT 72-190 (0.50%) | Brucellosis: metritis, mastitis, infertility, abortion, bacteremia (zoonosis) |
| Bacillus anthracis strain RKI03-01640 | AFNOR NFT 72-190 (0.50%) | Antrax |
| Fungi and yeasts | Norm (Dilution) | Disease |
| Aspergillus fumigatus | EN1650 (0.50%), EST NI (0.50%), EST ENG (0.25%), AOAC Fungi (0.50%) | Mycotoxicosis: abortion, no lactation, liver damage, immunosuppression (sows) |
| Fusarium dimerum | AOAC Fungi (0.25%) | Mycotoxicosis: rectal/ vaginal prolaps, swollen vagina, stillbirth |
| Geotrichum candidum | NFT 72 301 (0.10%) | Geotrichosis: lumps in lymph nodes |
| Trichophyton mentagrophytes | EN 1650 (2.00%), AOAC (0.25%) | Dermatofytosis (ringworm) |
| Viruses | Norm (Dilution) | Disease |
| Foot and mouth disease virus | VIROCID FMD Eng (0.10%), NFT 72-180 (0.50%), Technical file FMD (0.50%), National Institute for Veterinary Research (0.10%) | Foot and mouth disease (zoönose) |
| H1N1 Influenza A (Mexican Flu) | US EPA 40 (0.25%) | Swine Influenza/ Mexican flu (zoonosis) |
| H5N1 Influenza | H5N1 - test China (0.08%), US EPA 40 (0.25%), Use-dilution test AOAC (0.25%) | Avian influenza (zoonosis) |
| Swine Fever | AFNOR NFT 72-180 (0.10%), AFNOR 86081 (0.25%), AFNOR (0.25%) | Swine fever |
| Talfan disease | AFNOR NFT 72-180 (hard water) (1.00%), AFNOR NFT 72-180 (proteins) (1.00%), AFNOR NFT 72-180 (Substances Interférences) (4.00%) | Teschen disease / Talfan disease: paralysis |
| Swine Vesicular Disease Virus (SVDV) | EN 14675 (0.50%) | Swine vesicular disease |
| Vesicular stomatitis Virus (VSV) | EN 14675 (1.50%) | Vesiculaire stomatitis (zoonosis) |
| Aujeszky's disease/ Pseudorabies | AFNOR (0.25%), AOAC (0.25%) | Aujeszky's disease/ Pseudorabies |
| African Swine Fever Virus | ASFV 2011 (0.50%) | African swine fever |
| PRRS | EPA 810.2100 (0.25%) | Porcine reproductive and respiratory syndrome |
| Porcine Circovirus | EPA 810.2100 (0.50%), EPA 810.2100 (1.00%) | Porcine circovirus/ Porcine Multisystemic Wasting Syndrome |
| Porcine Circovirus | EPA 810.2100 (0.50%), EPA 810.2100 (1.00%) | Porcine circovirus/ Porcine Multisystemic Wasting Syndrome |
| Porcine Epidemic Diarrhea virus | ASTM E1053-11 (compliant with EPA requirements) (0.25%) | Porcine Epidemic Diarrhea |
| PED Virus | EPA U.S. (0.25%) | Porcine Epidemic Diarrhea Virus |

Virocid - Poultry



| Bacteria | Norm (Dilution) | Disease |
|---|---|---|
| Bordetella avium | AOAC UDT (0.25%) | Bordetellosis: sinusitis, cough, clear nasal discharge |
| Campylobacter jejuni | AOAC UDT (0.25%), EN 1656 (0.25%) | Enteritis, death |
| Clostridium perfringens | EN 1276 (0.50%) | Acute or chronic enterotoxemia: necrotic enteritis |
| Enterococcus faecium | DVG (2.00%), DVG (0.50%), NFT 72 301 (0.25%), DVG (0.25%), DVG (0.50%) | Enterococciosis: endocarditis, sepsis, diarrhea |
| Enterococcus hirae | EN 1276 (0.25%), EN 1656 (0.50%), T72-300 AY (0.25%), T72-300 ED (0.25%), EN 13697 (0.50%), EN 14349: 2012 (0.50%), NFT 72-281 (FOGGING 10%) | Enterococciosis: endocarditis, sepsis, diarrhea |
| Escherichia coli | EN 1276 (0.25%), NFT 72 301 (0.25%), T72-300 AY (0.25%), T72-300 ED (0.25%), T72-190 ENG (0.25%), T72-190 NI (0.50%), EN 13697 (0.50%), EST (0.25%), AOAC Abu Dhabi (0.25%), ISO 22196:2007 (0.10%), AOAC UDT (0.25%), NFT 72-281 (FOGGING 10%) | Colibacillosis: sepsis, airsacculitis (infection of the air sac), pericarditis, perihepatitis |
| Haemophilus paragallinarum | AOAC UDT (0.25%) | Infectious coryza: nasal and ocular discharge, sneezing, facial swelling |
| Klebsiella pneumoniae | AOAC UDT (0.25%) | Klebsiellosis: diarrhea, sepsis, embryonic death and death of chicks |
| Listeria monocytogenes | AOAC UDT (0.25%) | Listeriosis: sepsis, local encephalitis, sudden death (zoonosis) |
| Mycoplasma gallisepticum | AOAC UDT (0.25%) | Mycoplasmosis: damage of the respiratory system |
| Mycoplasma synoviae | AOAC UDT (0.25%) | Tendinitis, bursitis, bronchitis, airsacculitis |
| Ornithobacterium rhinotracheale | AOAC UDT (0.25%) | Respiratory infections |
| Pasturella multocida | AOAC UDT (0.25%) | Pasteurellosis/ Avian cholera: respiratory infections, diarrhea, lameness, sudden death |
| Proteus mirabilis | EST (0.25%), DVG (0.50%), DVG (0.125%), DVG (1.00%), DVG (0.50%) | Omphallitis (infection of the yolk sac) |
| Pseudomonas aeruginosa | EN 1040 fr (0.50%), EN 1276 (0.50%), EN 1656 (0.50%), T72-300 AY (0.25%), T72-300 ED (0.25%), T72-190 ENG (0.25%), T72-190 NI (0.50%), AOAC UDT (0.25%), AOAC UDT (0.25%), EST (0.25%), CIRLAM SDP+paper (0.50%), CIRLAM SDP(thaw) (1.00%), NFT 72 301 (0.25%), DVG (0.125%), DVG (0.50%), DVG (0.125%), DVG (0.50%), AOAC UdmBasic (0.25%), AOAC Abu Dhabi (0.25%), EN 13697 (0.50%), EN 14349: 2012 (0.50%), NFT 72-281 (FOGGING 10%) | Pseudomoniasis: respiratory infections, embryonic death, dyspnea, sepsis, death. |
| Salmonella choleraesuis | AOAC UdmBasic (0.25%), AOAC UDT (0.25%) | Salmonellosis (zoonosis) |
| Salmonella enteritidis | EN 1276 (0.50%), AOAC 960.09 (0.125%), AOAC UDT (0.25%), EN 1656 (0.25%) | Salmonellosis (zoonosis) |
| Salmonella pullorum | AOACT UDT (0.25%) | Salmonellosis: Pullorum disease, 'Bacillary white diarrhea' (zoonosis) |
| Staphylococcus aureus | EN 140 fr (0.50%), EN 1276 (0.25%), EN 1656 (0.50%), T72-300 AY (0.25%), T72-300 ED (0.25%), T72-190 ENG (0.25%), T72-190 NI (0.50%), NFT 72 301 (0.25%), EST (0.25%), AOAC UDT (0.25%), CIRLAM SDP(thaw) (1.00%), CIRLAM SDP+paper (0.50%), DVG Böhm (0.125%), DVG Böse (0.50%), EN 13697 (0.50%), AOAC UdmBasic (0.25%), AOAC Abu Dhabi (0.25%), EN 14349: 2012 (0.50%) NFT 72-281 (FOGGING 10%) | Staphylococciosis: infections, sepsis, lameness |
| Staphylococcus hyicus | EN 1656 (0.25%), T72-190 NI (0.50%), EST (0.25%) | Skin lesions |
| Fungi and yeasts | Norm (Dilution) | Disease |
| Aspergillus fumigatus | EN1650 (0.50%), EST NI (0.50%), EST ENG (0.25%) | Aspergillosis |
| Candida albicans | T72-190 NI (0.25%), T72-190 ENG (0.25%), EST (0.50%), DVG (1.00%), DVG (0.50%), DVG (0.50%), EN 13697 (0.50%) | Candidiasis: malfunction of the crop |
| Viruses | Norm (Dilution) | Disease |
| Gumboro virus | Institut National de Recherches Vétérinaires (0.50%), AOAC (0.25%) | Gumboro disease/ Infectious Bursal Disease (IBD) |
| H1N1 Influenza A (Mexican Flu) | US EPA 40 (0.25%) | Swine influenza/ Mexican influenza (zoonosis) |
| H5N1 Influenza | H5N1 - test China (0.08%), US EPA 40 (0.25%), Use-dilution test AOAC (0.25%) | Avian influenza type H5N1 (zoonosis) |
| Virus Newcastle (Pseudo-fowl pest) | NFT 72-180 (0.10%), AOAC (0.25%), Institut National de Recherches Vétérinaires (0.50%) | Paramoxyvirus 1/ Newcastle disease (zoonosis) |
| Avian Influenza (bird flu or fowl pest) | Institut National de Recherches Vétérinaires (1.00%), AOAC (0.25%), | Avian influenza (zoonosis) |
| Reovirus | Institut National de Recherches Vétérinaires (0.50%), AOAC (0.25%) | Viral arthritis |
| Marek's disease virus | AOAC (0.25%) | Marek's disease |
| Infectious bronchitis virus | EN 14675 (0.25%) | Infectious bronchitis |
| All Laryngotracheitis | AOAC (0.25%) | Infectious laryngotracheitis |