

## **NUEVOAGRI: Equine Bio-security**



### ***What is NuevoAgri?***

**NuevoAgri** is a totally new concept in equine bio-security. The product is a blend of carefully selected surfactants (wetting agents) detergents, disinfectants and antiseptics.

**NuevoAgri** at 1/100 dilution can also be used as a disinfectant (wash or spray) for hard surfaces and fabrics, stable blocks, horse boxes and vehicles, stable equipment such as girth straps, saddle, harnesses, bridles, head stalls and riding boots etc. as a fogging agent to achieve aerial disinfection of stables, horse boxes etc.

**NuevoAgri** contains a mixture of active ingredients, including a biguanide polymer and Quaternary Ammonium Compounds (QACs or Quats) which act together to give a rapid kill of a wide range of microbes; including bacteria, bacterial endospores, viruses, and fungi (moulds and yeasts) at low concentrations.

**NuevoAgri** retains its activity in hard water, does not cause surface streaks, and is low foaming. At normal-use concentrations **NuevoAgri** can be used and handled without PPE and is environmentally-friendly: containing no alcohol, VOCs, chlorine, peroxgens or formaldehyde.

Biguanides are widely used as disinfectants for medical and/dental utensils and trays, wound dressings and fabrics, farm equipment, hard surfaces in the food industry and hospitals, and drinking water for farm animals. They are also used as biocides for swimming pool treatments. As a preservative, biguanides can be found in many cosmetics, including personal care products, fabric softeners, contact lens solutions, and hand washes/wipes.

QACs are also widely used as disinfectants and are the active ingredients in a wide range of household and janitorial cleaning products, and in solutions used for sterilizing medical and dental instruments. QACs are also widely used as preservatives in eye drops, nasal sprays and mouthwashes, and as biocides in a number of industrial processes (water treatment, paper processing and wood preservation). QACs also behave as detergents providing a foaming and cleansing action when used in personal care products for skin and hair: the QACs condition the hair, leave the skin feeling soft, and both protected by an antiseptic/antimicrobial coating.

### **Antimicrobial Activity of NUEVOAGRI**

Biguanides and QACs are proven, well-documented biocides with broad-spectrum activity against a wide range of microbes. Initial testing using **NuevoAgri** has demonstrated enhanced efficacy against Gram-positive and Gram-negative bacteria, bacterial endospores and viruses at a dilution rate of 1:100.

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At dilutions of 1:50 **NuevoAgri** will inactivate both enveloped and naked RNA/DNA viruses including a range of medically important viruses including Herpes simplex type 1 (Herpesviridae), Influenza Hong Kong Virus (Orthomyxoviridae) and Vaccinia (Poxviridae). **NuevoAgri** has also been shown to be highly effective against viruses associated with gastroenteritis (Rotavirus) and also a range of bird and animal viruses including Foot and Mouth Virus (Picornaviridae), Herpes virus, Coronavirus, Poxvirus and Parvovirus. Pathogenic Avian influenza virus (both H7N1 and H5N1) will require higher concentrations of **NuevoAgri**. Research indicates that **NuevoAgri** rapidly penetrates the cell walls and membranes of microbial cells, causing leakage of the cytoplasmic contents and cell death. **NuevoAgri** also inactivates microbial DNA and RNA, preventing cell growth and multiplication of bacteria, bacterial endospores, moulds and yeasts; and replication of viruses.

Equine infections and diseases are spread in a number of ways

1. The most common way is by direct contact with another animal, usually another horse or pony; or by exposure to domestic, farm, and wild animals; and insects. Horses can also come into direct contact with contaminated surfaces in the stable block, soil, equipment, vehicles and people who have been exposed to diseased animals.

### ***NuevoAgri:***

- ***NuevoAgri: disinfection of contaminated surfaces. Stables, Horse Boxes, stalls, vehicles, etc.***
  - Remove all equipment (feeding and drinking troughs, buckets etc.)
  - Remove all organic material (soil, mud, dung, used bedding etc.) using forks, shovels and brushes
  - Disinfect all surfaces with **NuevoAgri** solution (1:100 dilution rate) using either a pressure washer, hand- or knapsack-sprayer or watering can, and leave to dry.
  - Disinfect removed equipment by washing/spaying with **NuevoAgri** solution (1:100 dilution rate), rinse with clean water and allow to dry, and then replace equipment and replenish feed and bedding.
  - Alternatively, clean and disinfect removed equipment in an **Ultrasonic Bath**, using **NuevoAgri** solution for cleaning and disinfection, dry before use.
2. Contaminated air can also spread pathogenic microbes; as stable dust, airborne nasal discharges, faeces and urine can transmit infection from horse to horse. Aerosolized water droplets from running taps, and particularly hoses and water jets can also pose an infection risk to horses (and handlers) – as they can spray infected materials into the air [these aerosols can also act as a source of Legionnaires' Disease, which can affect both humans and horses].

### ***NUEVO Fogging Mist: Aerial Disinfection (whole room/vehicle/horse-box disinfection)***

Fogging/misting of enclosed areas with **Nuevo Fogging** can achieve aerial disinfection – removing airborne microbes, and surface disinfection by depositing **Nuevo** solution on exposed surfaces. **Nuevo Fogging Mist** has been tested using the Dyna-Fog Cyclone 2732 hand-held fogger treats up to 1000m<sup>2</sup> [www.fargro.co.uk](http://www.fargro.co.uk).

3. Contaminated feed, water and bedding can also act as a source of infection, however these are generally dealt with as matters of animal husbandry/housekeeping rather than disinfection procedures.

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