# Virocid

#### NUMBER 1 FOR A REASON!

In today's production world, an efficient and continuous disinfection is a top priority. Virulent diseases not only skim the profits away, they can even affect a whole industry. An ounce of prevention is worth a pound of cure!

Where Virocid<sup>®</sup> is being applied, bacteria, viruses, fungi and spores have no chance. Investing in the bio-security of animals, houses, materials, buildings, vehicles and people is a prudent managerial decision. It leads to better production results and can prevent diseases.

The bigger and more intensive animal husbandry becomes, the bigger the risk for virulent diseases.

The bactericidal, virucidal, fungicidal and sporicidal effect of Virocid<sup>®</sup> is unique in the world and is safe for people ,animals, equipment and the environment.





## PEOPLE (A



#### MAXIMUM EXPOSURE LIMIT (MEL)

MEL: legislation concerning the protection of the human health and the security of the employees against the risks of chemical agents on the work floor.

Virocid® complies with MEL. This means that the amount of glutaraldehyde in aerosol is below the Maximum Exposure Limit. To be classified as safe to use for humans in a dilution of 1:200 (0,5%), MEL allows maximum 0.05 ppm glutaraldehyde particles in the air after 15 minutes exposure time.

Contains no carcenogenic formaldehyde nor toxic phenolics.

# **ENVIRONMENT**



#### **BIODEGRADABILITY**

Virocid° is readily biodegradable for more than 90% after 28 days, according to European Commission Directive 84/449/EEC and the OECD (Organisation for Economic Co-operation and Development).

No residues of heavy metals or trihalomethanes.

Virocid® used for disinfection of farm buildings will not affect the activity in biogas installations.

# TEMPERATURE RANGE (



Virocid<sup>®</sup> can be used between 4° - 60°C, and even in freezing temperatures, by adding propylene glycol.

Also tested in seawater (CFR Test University of Bergen, Norway). Test available upon request.

# STABILITY (



The dilution of 0,5% (1:200) and 1% (1:100) is stable in water of  $6^{\circ}$ C (43 F), 25°C (77 F) and 40°C (104 F) during 4 weeks.

The concentrate has a shelf life of 3 years, at an average temperature of 25°C.

## **SURFACES**



#### **NON-CORROSIVE**

Virocid® at 0,5%, after 1000h of immersion causes no corrosion on surfaces commonly used in livestock industries and therefore can be used safely.

| TYPE OF SURFACE  | WEIGHTLOSS %<br>after 1000H | CORROSION VALUE mm/year after 1000H |
|------------------|-----------------------------|-------------------------------------|
| Copper           | 0,056%                      | 0,0020                              |
| Brass            | 0,062%                      | 0,0026                              |
| Anodized Alu     | 0,13%                       | 0,0027                              |
| Galvanized Steel | 0,000%                      | 0                                   |
| Corrosion if *   | > 80%                       | > 6,25                              |

Corrosivity test done at CIRLAM laboratory based on UN no. ST/SG/AC 10/11/Rev 4 auidelines.

In dilution, Virocid<sup>®</sup> has a pH around neutral.

| Acidi   | ic |   | Neutral |   |   |    |                |  |   |    | Alkaline |    |    |    |
|---------|----|---|---------|---|---|----|----------------|--|---|----|----------|----|----|----|
|         |    |   |         |   |   |    | рН             |  |   |    |          |    |    | _  |
| •       | 1  | 2 | 3       | 4 | 5 | _• | 7 <sub>_</sub> |  | , | 10 | 11       | 12 | 13 | 14 |
| Virocid |    |   |         |   |   |    |                |  |   |    |          |    |    |    |

# **EQUIPMENT**





#### **VDA**

#### Virocid® is VDA approved at 1% as class A.



Products with a VDA approval meet the highest German quality standards, meaning not corrosive on vehicles.

VDA = German Association of the Automotive Industry.



considered norm for the ADR transport law. 0,1mm/year gives a visual appearance of beginning corrosivity

# **ENDLESS APPLICATIONS**

#### VIROCID° CAN BE APPLIED IN A VERSATILE WAY, WITHOUT HAVING TO ADD ANY ADDITIVES:



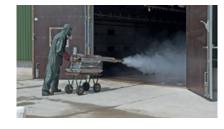
#### **FOAMING**

A foam lance with high pressure (min. 40 bar) or medium pressure with compressed air (25 bar) is enough to make Virocid\* foam by itself. The nice white foam shows if every spot has been covered. It also gives a longer contact time, therefore: superior disinfection results. Dilution: 0.25-0.5%.



#### **SPRAYING**

Virocid® can be sprayed through manual or PTO driven spraying systems. **Dilution: 0.25-0.5%.** 



#### **THERMO FOGGING**

No need to add a "carrying agent" to fog Virocid\*. The small particles in the air allow for an "aerial disinfection". Reports of "non corrosive to the fogger" are available from different manufacturers of thermo foggers. Dilution: 1-2L product +3 L water/1000 m³.



#### **BOOT DIPS**

Virocid\* is ideal for boot dips, if disinfection baths are adequately used and located on strategic places, they are a good additional measure for biosecurity on the farm. **Dilution:** 0.5-1%.



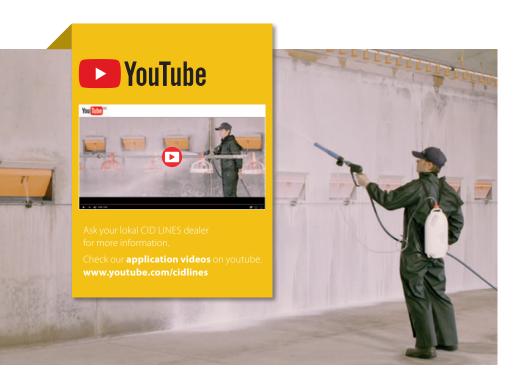
#### **TRANSPORT**

Virocid<sup>\*</sup> is approved by the VDA, the German Automobile Association as "Class A" (non corrosive). Dilution: 0.25-0.5%.



#### **HATCHING EGGS\***

Virocid" can be applied as an alternative to (carcinogenic) formaldehyde through our special nozzle. Tested on hundreds of thousands of hatching eggs! ("Not permitted in every country). Dilution: 10% through special nozzle.









Hygiene is health. Hygiene makes all the difference in the food chain, from farm to fork. At CID LINES we make hygiene work. We combine 360° solutions with tailored advice. We go for the highest service levels and we invest in continuous innovation. This way we help our partners focus on what's key: keeping their business profitable, sustainable and most of all healthy. Because hygiene is health and health means greater wellbeing for all.

