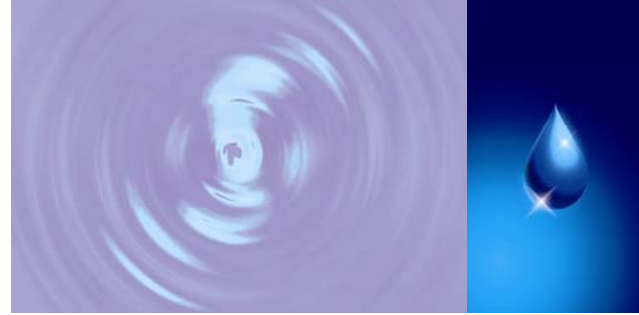


Eco cid. S



Eco cid. S

*Together with us you are building
successful and up to date solutions
in biosecurity programmes*



*Our innovation and knowledge
for effective and safe
products of the highest quality.*



SAFE AND EFFECTIVE

Ecocid®

Proven solution

- ▶ **Ecocid S is a universal highly active disinfectant for safe and effective protection against causative agents of dangerous infectious diseases**
- ▶ **Disinfectant with a broad spectrum virucidal, bactericidal and fungicidal action**
- ▶ **Water soluble powder for easy use on any kind of surfaces**
- ▶ **Environmentally friendly, safe for man and animals.**
- ▶ **Consistent with HACCP system**



General properties - COMPOSITION

The active substance of Ecocid S is potassium peroxydisulphate. Product efficacy is increased by added surfactants, organic acids and an inorganic buffer system.

The full formulation

- Triple salt of potassium monopersulphate - Oxidising agent
 - Sulphamic acid - Organic acid/catalyst
 - Malic acid - Organic acid/catalyst
 - Sodium hexametaphosphate - Buffering agent
 - Sodium dodecyl benzene sulphonate - Surfactant
- Three further components:
- Salt (sodium chloride).
 - A pink dye
 - Lemon peel perfume



Sodium dodecyl benzene sulphonate

SURFACTANT

Ecocid®

Proven solution

- ▶ Ensure contact with the microorganism
- ▶ Attacks/emulsifies lipid
- ▶ In acid medium reacts with some proteins denaturing them



Organic acids – CATALYSTS

Ecocid®

Proven solution

▶ **sulphamic acid and malic acid**

- Produce low pH without significant corrosive effect
- Control oxidising activity
- Have selective virucidal activity



KMPS – Oxidising agent

Ecocid®

Proven solution

▶ **KMPS = potassium monopersulfat**

- Oxidises glycoproteins, polypeptides, nucleic acid and carbohydrates. React with sulphhydryl groups in the nucleic protein
- Stability and activity optimised under acid conditions



Sodium hexametaphosphate

BUFFERING AGENT

Ecocid®

Proven solution

- ▶ Maintains low pH which optimises biocidal activity
- ▶ Improved resistance to inactivation by hard water and organic matter



Other components in Ecocid S

Ecocid®

Proven solution

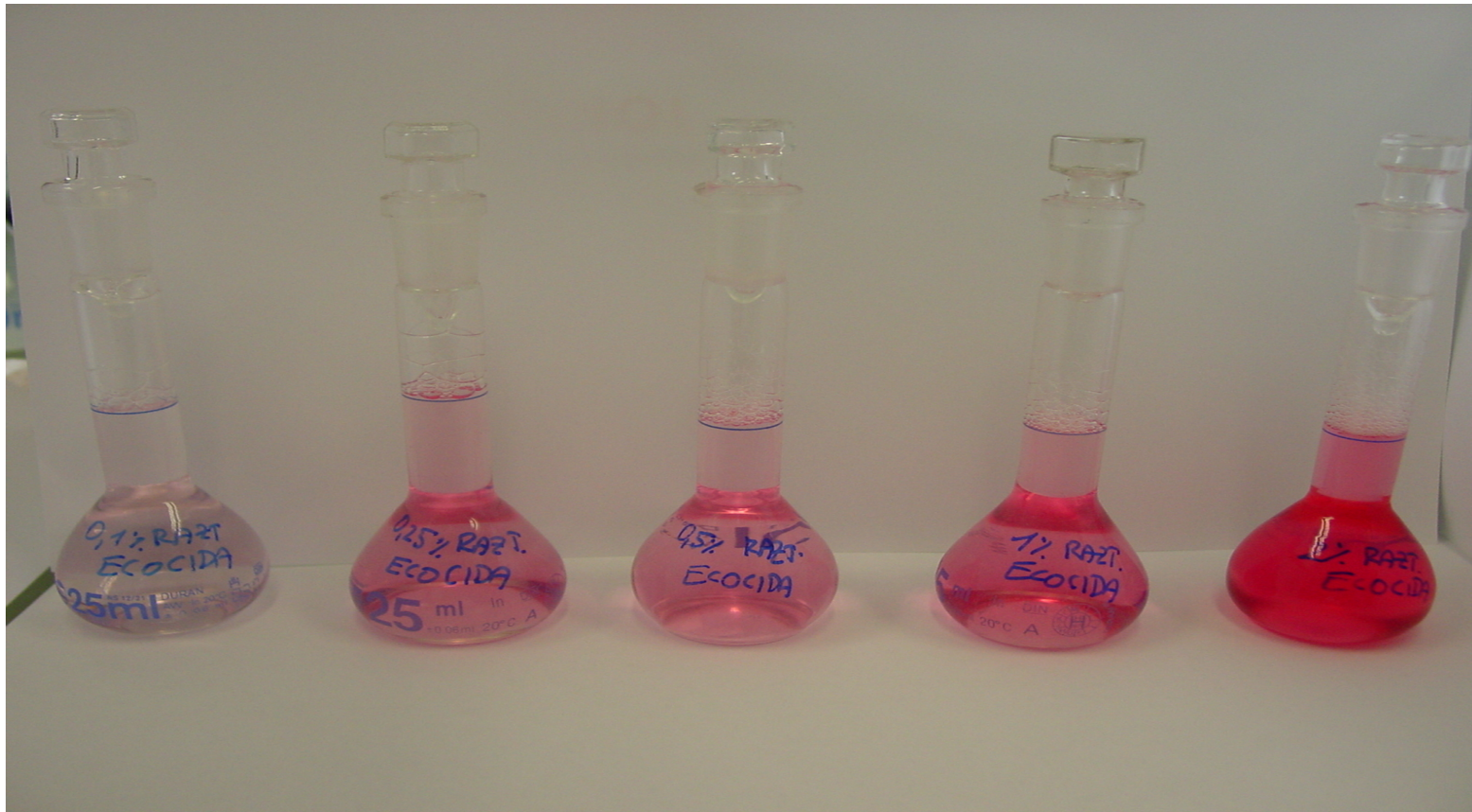
- ▶ Salt (sodium chloride)
- ▶ A pink dye
 - indicate whether Ecocid S solution is active
- ▶ Lemon peel perfume
 - gives the powder characteristic odour



COLOUR OF DIFFERENT DILUTIONS

Ecocid®

Proven solution



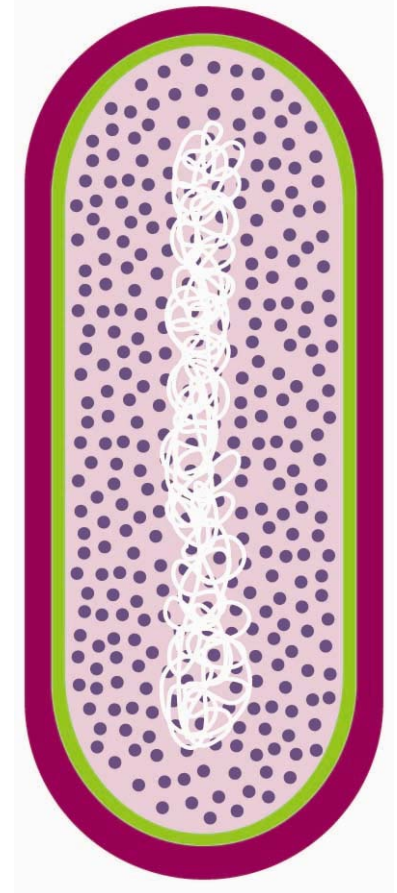


MODE OF ACTION

Ecocid®

Proven solution

- ▶ By oxidation of proteins and other components of cell protoplasm, resulting in inhibition of enzyme systems and loss of cell wall integrity.





GENERAL PROPERTIES

Ecocid®

Proven solution

- ▶ **aerial, surface and water system disinfectant**
- ▶ **for use in all types of animal housing, fish farms, greenhouses and veterinary surgeries**
- ▶ **safe and suitable for use with all types of animals and birds**
- ▶ **no environmental residue problems**



GENERAL PROPERTIES

Ecocid®

Proven solution

- ▶ an excellent and safe water sanitizer
- ▶ suitable for manual or machine application
- ▶ non-tainting
- ▶ of exceptionally low toxicity
- ▶ an pink powder for easy and accurate dilution
- readily soluble in tepid water giving a pink solution.



CHEMICAL AND PHYSICAL PROPERTIES

Ecocid®

Proven solution

properties	
composition	Potassium peroxomono sulphate
appearance	Pink-grey powder with lemon odour
activity	Strong oxidising system
Available oxygen content	9.5 % - 10.7 %
stability	3 years up to 30 °C
pH – 1 % solution	2.0 – 2.7
solubility	readily soluble in tepid water



COMPATIBILITY

Ecocid®

Proven solution

- ▶ compatible with a wide range of materials including stainless steel, plastics and rubber
- ▶ used as directed, is non-corrosive



BIODEGRADABILITY

Ecocid®

Proven solution

- ▶ Ecocid S consists more than 70 % of inorganic salts which decompose into harmless by-product.
- ▶ The surfactant in the formulation is a salt of a straight chain alkyl benzene sulphonate complying with Directive 2004/10/EC, giving more than 90% biodegradability under OECD test conditions.
- ▶ Organic acids are 100 % biodegradable.



INSTRUCTION FOR USE

Ecocid®

Proven solution

Use	Dilution	Use and application
Terminal disinfection	1 : 100(1%)	Apply working solution to pre-cleaned surfaces using a low-pressure sprayer or another mechanical sprayer at a dose of 300ml/m ² . After 30 to 60 minutes, or after the surfaces have dried, return the animals
Cleaning and Disinfecting Equipment at farms, in hatcheries or in feed preparation facilities	1 : 200 – 1 : 33 (0.5 % to 3%) depending on level of soiling	Clean surfaces and disinfect by applying working solution with a low-pressure disinfection sprayer or another mechanical sprayer at a dose of 300 ml/m ² . After 15 to 60 minutes, depending on level of soiling, rinse with clean water.
Cleaning and disinfecting farm surfaces and equipment with a high level of soiling	1 : 50 – 1 : 33 (2% to 3%)	Wash, clean and disinfect surfaces by applying working solution with a low-pressure disinfection sprayer or another mechanical sprayer at a dose of 300 ml/m ² . After 30 minutes rinse with clean water.



INSTRUCTION FOR USE

Ecocid®

Proven solution

Use	Dilution	Use and Application
Sanitizing drinking water systems Terminal cleaning and sanitizing	1 : 200 (0.5 %)	Fill water tank and supply system with working solution. After 60 minutes, rinse the system thoroughly with clean water.
Continuous sterilization of drinking water	1 : 1000 (0.1%)	Mix an appropriate quantity of Ecocid S into water tank or prepare an appropriate amount of working solution; pour the solution into an automatic dosing device.
Disinfection barrier for vehicles and footwear and bath for disinfecting hoofs	1 : 100 (1%)	Use disinfection barrier and hoof bath for 4 days or until they are too soiled.



INSTRUCTION FOR USE

Ecocid®

Proven solution

Use	Dilution	Use and Application
Aerial disinfection Aerial spraying to reduce cross infection during outbreaks of disease (particularly respiratory tract diseases)	1 : 200 (0.5%)	Disinfect with a pressure device allowing very fine spraying or with a knapsack sprayer at a dose of 1 l/10 m ² floor area.
Cold fogging	1 : 100 (1%)	Fog empty facilities (stables) using a mechanical fogging machine at a dose of 1 l/10 m ² floor area and allow to work for 30 minutes. Ventilate the facilities for 30 to 60 minutes before returning the animals.
Thermal fogging	1 : 25 (4%)	First mix fog enhancer with water at a ratio of 15 parts enhancer to 85 parts water. Add Ecocid S to the solution. Fog facilities (stable) using a thermal fogging machine at a dose of 1 l/40 m ² floor area and allow to work for 30 to 60 minutes. Ventilate the facilities for 30 to 60 minutes before returning the animals.



Packaging

Ecocid®

Proven solution

Available in different pack sizes: sachets of 25 x 50 g, 1 kg and 2.5 kg powder.





PREPARING 1 % SOLUTION

Ecocid®

Proven solution



Ecocid S	WATER
5g	500ml
10g	1 litre
50g	5 litres
500g	50 litres



Dilution testing kits

Ecocid®

Proven solution



3.0 %



2.0 %



1.0 %



0.5 %



0.1 %





Dilution testing kits

Ecocid®

Proven solution

- ▶ Check dilution of prepared solution
- ▶ Calibrate dosage equipment
- ▶ Check activity of foot dips
- ▶ Check dilution on surface being treated - and not just the solution coming out of the lance



Dilution testing kits

Ecocid®

Proven solution

- ▶ Save money -and avoid wasting product and be confident you have the right strength
- ▶ Easy to use - dip and check with instant results
- ▶ HACCP verification



PROVEN EFFECTIV- independent tests

Ecocid®

Proven solution

▶ **laboratory test (European standard)**

- Universität Hohenheim (Institut für Umwelt und Tierhygiene Sowie Tiermedizin mit Tierklinik, prof. dr. Reinhard Böhm), Germany
- Universität Giessen, prof. dr. E. F. Kaleta, Germany
- University in Ljubljana, Veterinary faculty, Slovenia
- Veterinary Institute in Croatia

▶ **field test**

- Pig and poultry farm (Slovenia, Poland, Ukraine)



PROVEN EFFECTIV

Ecocid®

Proven solution

- ▶ **Virucidal activity**
 - against viruses from 13 family
- ▶ **Bactericidal activity**
 - 21 different species of bacteria (Gram positive, Gram negative, antibiotic resistant)
- ▶ **Fungicidal activity**

Species	Dilution
<i>Candida albicans</i>	1:200
<i>Trichophyton mentagrophytes</i>	1 : 300



VIRUCIDAL ACTIVITY

Ecocid®

Proven solution

Virus	Dilution
Bovine enterovirus type 1 (ECBO)	1 :100
Aviary influenza virus, H7N1	1:640
Aviary influenza virus, H5N1	1:320
Atypical chicken pest virus (NDV)	1:280
Aujeszky's disease virus	1:200
Classical swine pest virus	1:200
Corona virus Feline calicivirus	1:800
Infectious bursal disease (IBDV 1187/06) – high pathogenic	1: 30 (3 %)
Infectious bursal disease	1:100
Feline calicivirus	1:800
Adenovirus type 1	1:400
Rheovirus type 1	1:400
Rabies virus	1:1600
Polyvirus tip 1	1:200
Parvovirus Haden strain	1:800
Adenovirus type 5, Adenoid 75 strain	1:200



BACTERICIDAL ACTIVITY

Ecocid®

Proven solution

Bacterial strain	Dilution
<i>Actinobacillus pleuropneumoniae</i>	1:400
<i>Bordetella bronchiseptica</i>	1:200
<i>Campylobacter jejuni</i>	1:200
<i>Clostridium perfringens</i>	1:200
<i>Enterococcus hirae</i>	1:75
<i>Escherichia coli</i>	1:200
<i>Erysipelothrix rhusiopathiae</i>	1:200
<i>Listeria monocytogenes</i>	1:200
<i>Mannheimia (Pasteurella) haemolytica</i>	1:200
<i>Pasteurella multocida</i>	1:200
<i>Pseudimonas aeruginosa</i>	1:75
<i>Proteus hauseri</i>	1 :75
<i>Salmonella enteritidis</i>	1:200
<i>Staphylococcus aureus</i>	1: 75
<i>Staphylococcus intermedius</i>	1:200
<i>Streptococcus suis</i>	1:200



ECOCID S

Ecocid®

Proven solution

- ▶ **Effective** – virucidal, bactericidal and fungicidal activity
- ▶ **ECOLOGICALLY acceptable bioCID**
 - ▶ **Safe** - to man, animals and the environment
- ▶ **Universal use** - aerial, surface and water system disinfectant

