



Recommendations for Decontamination of Avian Influenza Virus in Agricultural and Food Processing

NOTE:

- **European Product Range**
 - **Consult your local Ecolab representative for products which meet local regulatory requirements and are available within your area.**
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1.1 General Cleaning



“Decontamination recommendations” for the inactivation of the Fowl Plague Virus

COP- Cleaning & Disinfection

AGRICULTURE / FOOD INDUSTRIES

Application:

COP (Cleaning-on-Place) / Foam application

Typical residues:

Mixture of fat, protein, stool, faeces, microbes.

Specific application area:

Exterior cleaning (COP) of e. g. facilities in breeding, floors and walls.

General information:

Please control that all surfaces are completely covered by the disinfectant! Please check especially critical areas.

Please wear protective clothing during the disinfecting actions (Safety training! Please pay attention to the information within the safety data sheets).

If possible please prevent the dry up of residues on the surfaces.

Cleaning interval: daily

Cleaning Procedure & Chemicals

Notes



Preparation for Cleaning

Cover all sensitive parts.



Remove coarse soil

Gather large parts with a squeegee or broom and deposit the remains in a tray.



Pre-rinsing Water

Rinse equipment, floor and walls with low pressure from top to bottom in the direction of the drain.
Clean the drain.



Collect residues

Collect residues with a wiper. Deposit them in a tray. Remove them to waste.



Chlor-alkaline Cleaning P3-topax 66

Foam from bottom to top. A contact time of 15 minutes is needed to soften and prepare the deposits.



Intermittent rinse Water

Remove deposits by rinsing with low pressure from top to bottom.



Cleanliness check

Check all critical area.
Re-clean if necessary.



Disinfection
P3-incidin 01
alternative
P3-incidin 03
or **P3-oxonia active 150**

Disinfect from top to bottom. Treat all surfaces completely with the disinfectant. Disinfect after each cleaning.

Use **P3-incidin 03** (approved NL-sales products) according to conditions mentioned within the NL-registration file. **P3-oxonia active 150** could also be used below 10°C.

Note: Do not use **P3-oxonia active 150** in closed systems, otherwise oxygen formation cause high pressure. Please take for over-pressure relief! Please check the material comparability prior to the usage of **P3-oxonia active 150**! The cold usage of **P3-oxonia active 150** is mandatory! Please read the instructions within the product data sheet before use!



Store cleaning tools

To prevent cross-contamination, clean all cleaning tools and soak into a 1% **P3-incidin 01 / - 03** solution. Refresh disinfectant solution every day.

1.2 General Cleaning of Al, Soft Metal, and Painted Surfaces









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COP- Cleaning & Disinfection

AGRICULTURE / FOOD INDUSTRIES

<p><u>Application:</u> COP (Cleaning-on-Place) / Foam application</p>	<p><u>Typical residues:</u> Mixture of fat, protein, stool, faeces, microbes.</p>
<p><u>Specific application area:</u> Exterior cleaning (COP) of e.g. facilities in breeding, floors and walls.</p>	<p><u>General information:</u> Please control that all surfaces are completely covered by the disinfectant! Please check especially critical areas. Please wear protective clothing during the disinfecting actions (Safety training! Please pay attention to the information within the safety data sheets). If possible please prevent the dry up of residues on the surfaces.</p>

Cleaning frequency: daily

Cleaning Procedure & Chemicals	Notes
 <p>Preparation for Cleaning</p>	Cover all sensitive parts.
 <p>Remove coarse soil</p>	Gather large parts with a squeegee or broom and deposit the remains in a tray.
 <p>Pre-rinsing Water</p>	Rinse equipment, floor and walls with low pressure from top to bottom in the direction of the drain. Clean the drain.
 <p>Collect residues</p>	Collect residues with a wiper. Deposit them in a tray. Remove them to waste.
 <p>Chlorine-alkaline Cleaning P3-topax 68</p>	Foam from bottom to top. A contact time of 15 minutes is needed to soften and prepare the deposits.
 <p>Intermittent rinse Water</p>	Remove deposits by rinsing with low pressure from top to bottom.


 <p>Cleanliness check</p>	<p>Check all critical area. Re-clean if necessary.</p>
 <p>Disinfection P3-incidin 01 alternative P3-incidin 03 or P3-oxonia active 150</p>	<p>Disinfect from top to bottom. Treat <u>all</u> surfaces completely with the disinfectant. Disinfect after each cleaning.</p> <p>Use P3-incidin 03 (approved NL-sales products) according to conditions mentioned within the NL-registration file. P3-oxonia active 150 could also be used below 10°C.</p> <p><u>Note:</u> Do not use P3-oxonia active 150 in closed systems, otherwise oxygen formation cause high pressure. Please take for over-pressure relief! Please check the material comparability prior to the usage of P3-oxonia active 150! The cold usage of P3-oxonia active 150 is mandatory! Please read the instructions within the product data sheet before use!</p>
 <p>Store cleaning tools</p>	<p>To prevent cross-contamination, clean all cleaning tools and soak into a 1% P3-incidin 01 /- 03 solution. Refresh disinfectant solution every day.</p>






“Decontamination recommendations”
for the inactivation of the Fowl Plague Virus

CIP- Cleaning & Disinfection

AGRICULTURE / FOOD INDUSTRIES

<p><u>Application:</u> CIP cleaning</p>	<p><u>Typical residues:</u> a. o. protein, fat, mono-, di-, polysaccharide (residues partially dried on), micro-organisms.</p>
<p><u>Specific application area:</u> CIP-Facilities for the production of e. g. milk products</p>	<p><u>General information:</u> To achieve sufficient cleaning results, turbulence flow of the cleaning solution is required (stainless steel 1.5 up to 2.0m/sec). Prior to each disinfection a cleaning step is required.</p>
<p><u>Cleaning frequency:</u> if required</p>	
Cleaning Products & Chemicals	Notes
 <p>Pre-rinsing Water</p>	<p>Thorough rinsing of all surfaces.</p>
 <p>Alkaline Cleaning P3-mip CIP</p>	<p>P3-mip CIP is a alkaline product. Phase-separation, control and dosage through conductivity measurement. The application solution could be stored but has to be refreshed on a regular basis. The interval of the refreshing depends on quantity and quality of the present dirt. A well adjusted phase-separation prolong the storage time.</p>
 <p>Intermediate Rinse Water</p>	<p>Thorough rinsing of all surfaces.</p>
 <p>Alkaline Cleaning P3-horolith CIP</p>	<p>The acidic cleaning step is recommended to remove mineral residues.</p>
 <p>Cleanliness check</p>	<p>Check all critical area. Re-clean with water if necessary.</p>

 <p style="text-align: center;">Intermediate Rinse Water</p>	<p>Thorough rinsing of all surfaces.</p>
 <p style="text-align: center;">Disinfection P3-oxonia active 150</p>	<p>P3-oxonia active 150 is a disinfectant based on peracetic acid. It could be expected, that the application of P3-oxonia active 150 at the recommended concentration give sufficient inactivation of the Fowl Plague Virus even below 10°C.</p> <p><u>Note:</u> Please check the material comparability prior to the usage of P3-oxonia active 150 (especially present sealing) The cold usage of P3-oxonia active 150 is mandatory!</p>
 <p style="text-align: center;">Final Rinse Potable water</p>	<p>Final rinse with potable water.</p>

2.1 Vehicle Treatment (Outside)








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COP- Cleaning & Disinfection

AGRICULTURE / FOOD INDUSTRIES

<p><u>Application:</u> COP (Cleaning-on-Place) / Foam application</p>	<p><u>Typical residues:</u> Dust, fat, synthetic oil, grease, possibly microbes.</p>
<p><u>Specific application area:</u> Exterior cleaning (COP) of Ramps Trucks, vehicles outer surfaces.</p> <p>For vehicle-passage-bathes see extra “Decontamination recommendation” 2.3)</p>	<p><u>General information:</u> Please control that all surfaces are completely covered by the disinfectant! Please check especially critical areas.</p> <p>Please wear protective clothing during the disinfecting actions (Safety training! Please pay attention to the information within the safety data sheets).</p> <p>If possible please prevent the dry up of residues on the surfaces.</p>

Cleaning interval: if required (e. g. after every contamination, after the transport of risk material)

Cleaning Procedure & Chemicals	Notes
 <p>Pre-rinsing Water</p>	Rinse from top to bottom.
 <p>Mild-alkaline Cleaning P3-clint KF</p>	Foam from bottom to top. A contact time of 15 minutes is needed to soften and prepare the deposits. The treatment of aluminium and/or galvanised surfaces with P3-clint KF cause slightly material lost.
 <p>Intermittent rinse Water</p>	Rinse with low pressure from top to bottom.
 <p>Cleanliness check</p>	Check all critical area. Re-clean if necessary.
 <p>Disinfection P3-incidin 01 alternative P3-incidin 03</p>	Disinfect from top to bottom. Treat <u>all</u> surfaces completely with the disinfectant. Disinfect after each cleaning. Use P3-incidin 03 (approved NL-sales products) according to conditions mentioned within the NL-registration file.



Store cleaning tools

To prevent cross-contamination, clean all cleaning tools and soak into a 1% **P3-incidin 01-03** solution. Refresh disinfectant solution every day.

2.2 Vehicle Treatment (Inside)



“Decontamination recommendations” for the inactivation of the Fowl Plague Virus

COP- Cleaning & Disinfection

AGRICULTURE / FOOD INDUSTRIES

Application:

COP (Cleaning-on-Place) / Foam application

Typical residues:

Mixture of fat, protein, stool, faeces, microbes

Specific application area:

Exterior cleaning (COP) of Trucks loading spaces.

For vehicle-passage-bathes see extra “Cleaning recommendation” 2.3)






General information:

Please control that all surfaces are completely covered by the disinfectant! Please check especially critical areas.

Please wear protective clothing during the disinfecting actions (Safety training! Please pay attention to the information within the safety data sheets).

If possible please prevent the dry up of residues on the surfaces.

Cleaning frequency: if required (e. g. after every contamination, after the transport of risk material)

Cleaning Procedure & Chemicals	Notes
 <p>Pre-rinsing Water</p>	Rinse from top to bottom.
 <p>Mild-alkaline Cleaning P3-steril</p>	Foam from bottom to top. A contact time of 15 minutes is needed to soften and prepare the deposits.
 <p>Intermittent Rinse Water</p>	Rinse with low pressure from top to bottom.
 <p>Cleanliness check</p>	Check all critical area. Re-clean if necessary.
 <p>Disinfection P3-incidin 01 alternative P3-incidin 03</p>	Disinfect from top to bottom. Treat <u>all</u> surfaces completely with the disinfectant. Disinfect after each cleaning. Use P3-incidin 03 (approved NL-sales products) according to conditions mentioned within the NL-registration file.



Store cleaning tools

To prevent cross-contamination, clean all cleaning tools and soak into a 1% **P3-incidin 01 / - 03** solution. Refresh disinfectant solution every day.






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COP- Cleaning & Disinfection

AGRICULTURE / FOOD INDUSTRIES

<u>Application:</u> COP (Cleaning-on-Place) / Foam application	<u>Typical residues:</u> Dust, fat, synthetic oil, grease, possibly microbes.
<u>Specific application area:</u> Vehicle-passage-bathes	<u>General information:</u> Please control that all surfaces are completely covered by the disinfectant! Please check especially critical areas. Please wear protective clothing during the disinfecting actions (Safety training! Please pay attention to the information within the safety data sheets). If possible please prevent the dry up of residues on the surfaces.

Cleaning frequency: Always when entering and leaving a farm, plant ...

Cleaning Procedure & Chemicals	Notes
 <p style="text-align: center;">Pre-rinsing Water</p>	The rinsing of the wheels is recommended to remove e from top to bottom. Remove coarse soil as good as possible.
 <p style="text-align: center;">Cleanliness check</p>	Check all critical area. Re-clean with water if necessary.
 <p style="text-align: center;">Disinfection P3-incidin 01 alternative P3-incidin 03 or P3-oxonia active 150</p>	Disinfect from top to bottom. Treat <u>all</u> surfaces completely with the disinfectant. Disinfect after each cleaning. Use P3-incidin 03 (approved NL-sales products) according to conditions mentioned within the NL-registration file. P3-oxonia active 150 could also be used below 10°C. <u>Note:</u> Do not use P3-oxonia active 150 in closed systems, otherwise oxygen formation cause high pressure. Please take for over-pressure relief! Please check the material comparability prior to the usage of P3-oxonia active 150 ! The cold usage of P3-oxonia active 150 is mandatory! Please read the instructions within the product data sheet before use!



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COP- Cleaning & Disinfection

AGRICULTURE / FOOD INDUSTRIES

Application:

Hand-cleaning and –disinfection

Typical residues:

Removal of harmful or unhealthy germs; organic soil

General information:

For a simple and handy application the usage of the **P3-ManoCenter** is recommended. The **P3-ManoCenter** contains a hand-hygiene-dispenser and a instruction-board.

Cleaning frequency: always when entering and after leaving work places

Cleaning Procedure & Chemicals

Notes



Pre-cleaning

Water

Hand-cleaning

P3-manosoft

or

P3-manoclean

Take 1 – 2 ml **P3-manosoft** / **P3-manoclean** from the dispenser.
Remove soil from the hand by rubbing: 15 – 30 seconds. Careful cleaning of the hands and fingernails!

A thorough cleaning is important for the successful hand hygiene. Most of the germ will be removed by a proper cleaning.

Intermittent Rinse

Water

The hands has to be absolutely dry prior to the disinfection.
Use disposable towels.

Wipe dry

Hand-disinfection

P3-manodes

Take 1 – 2 ml **P3-manodes** from the dispenser.
Treat the hands completely for approximately 15 – 30 seconds. Take special care on the areas between the fingers.

3.2 Working Cloth



“Decontamination recommendations” for the inactivation of the Fowl Plague Virus

COP- Cleaning & Disinfection

AGRICULTURE / FOOD INDUSTRIES

Application:

Laundry / Working cloth

Typical residues:

Possible a mixture of product-harmful or unhealthy germs; organic soil

General information:

To prevent cross-contamination it is recommended that especially employees from the processing-, packaging- and shipment-department change working cloth daily.

Place company-own safety cloth at visitor disposal.

Following the dirty laundry should be stored within a clothes laundry bag prior to the chemo-thermal treatment.

Cleaning frequency: If required / on a regular basis

Cleaning Procedure & Chemicals

Notes



Laundry-Hygiene
eltra®

The **eltra®**-procedure is recommended for a chemo-thermal laundry disinfection.



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COP- Cleaning & Disinfection

AGRICULTURE / FOOD INDUSTRIES

Application:

Spray-, brush application

Typical residues:

Possible a mixture of product-harmful or unhealthy germs; organic soil

Specific application area:

Boots-washing-machine

General information:

Tread are often heavily soiled. Missing or insufficient cleaning cause rapid growth of microbes. Risk of cross-contamination!
It is recommended to use a boot-washing-machine with rotating brush.
Please control the correct condition of the washing machine on a regular basis. We recommend making the cleaning of the machine a part of the general plant cleaning procedure.

Cleaning frequency: daily

Cleaning Procedure & Chemicals

Notes



Chlorine-alkaline Cleaning
P3-ansep CIP

P3-ansep CIP is recommended to remove organic deposits.
The cleaning time could vary and depends on the brand of the cleaning machine.



Cleanliness check

Visual check of cleanliness.
Re-clean if necessary.



Disinfection
P3-incidin 01
alternative
P3-incidin 03


Disinfect from top to bottom. Treat all surfaces completely with the disinfectant. Disinfect after each cleaning.
Use **P3-incidin 03** (approved NL-sales products) according to conditions mentioned within the NL-registration file.



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CIP- Cleaning & Disinfection

AGRICULTURE / FOOD INDUSTRIES

<p><u>Application:</u> COP</p>	<p><u>Typical residues:</u> Mixture of fats, protein, mono-, di-, polysaccharides, residues partially dried on, micro-organisms</p>
<p><u>Specific application area:</u> Run-through mats, run-through bath</p>	<p><u>General information:</u> In the profile often adhere dirt or organic components from the processing area. In case of no boot respectively footwear disinfection there is a danger of cross-contamination! <input type="checkbox"/></p>
<p><u>Cleaning frequency:</u> regularly (with entrance into and leaving of „pure“ areas like processing and packaging)</p>	
<p>Cleaning Procedure & Chemicals</p>	<p>Notes</p>
<div style="display: flex; align-items: center;">  <div> <p>Neutral Disinfection P3-incidin 01 alternative P3-incidin 03</p> </div> </div>	<p>P3-incidin 01 is a neutral detergent and disinfection agent with a good material compatibility. Use P3-incidin 03 (approved NL-sales products) according to conditions mentioned within the NL-registration file.</p>






4.1 Crate - Washing



“Decontamination recommendations” for the inactivation of the Fowl Plague Virus

CIP- Cleaning & Disinfection

AGRICULTURE / FOOD INDUSTRIES

<p><u>Application:</u> Tunnel washing machine (CIP)</p>	<p><u>Typical residues:</u> Mixture of fatty and protein, starch, cellulose layers, carbohydrates, colouring agents, dust, microbes.</p>
<p><u>Specific application area:</u> Tunnel washing machine (CIP)</p>	<p><u>General information:</u> Treat the crates with a 1.5% P3-incidin 01 solution (>10°C; 30 min.) prior to the cleaning to ensure the deactivation of viruses. Store dirty crates separately! Keep contaminated crates, transport equipment and tools which are in contact with soiled crates away from cleaned crates! Disinfect the transport equipment and pallets! Take care of personal hygiene and education. The function – justification, spray angle and free helix sense – of the spray nozzles must be controlled regularly. Don't stack moist boxes, danger of contamination.</p>
<p><u>Cleaning interval:</u> continuously</p>	
Cleaning Products & Chemicals	Notes
 <p>Remove Coarse soil</p>	<p>Coarse soil pollute the cleaning water. They should be removed by a turning installation or manual in front of the tunnel washer.</p>
 <p>Pre-rinsing Water</p>	
 <p>Alkaline cleaning P3-mip CIP</p>	<p>Control and dosage by conductivity. Renew cleaning solution every day if the solution becomes too heavily soiled. Fresh water is continuously fed to the machine.</p> <p>Dosage and control by conductivity. With high salt exposures from the contamination (curing area) a dosage proportional to the incoming water is recommended.</p> <p>Coarse soil should be removed continuously from the drain water (for example drum-sieve-system)</p>
 <p>Intermediate Rinse Water</p>	
 <p>Disinfection P3-oxysan</p>	



Final Rinse
Water



To whom it may concern

This leaflet provides information on preventative measures on how to protect your farm or food production against the *FLOW PLAGUE VIRUS*. You should ensure you maintain the highest standards of hygiene for all movements on and off your farm.

- Have only one combined entrance and exit. Display the name of the farm and telephone number on the gate. Keep the gate locked.
- Provide a means of contact between farm entrance and house for essential callers, e. g. a bell or gong.
- All vehicles entering and leaving the premises should have their wheels sprayed with approved disinfectant (see decontamination recommendation 2.3).
- Stop all non-essential vehicles and visitors from entering the farm and arrange whenever possible for collection and delivery of supplies to take place at farm boundary.
- Prevent "Cross-contamination". Treat each as a completely separate unit. Keep dogs, cats and poultry under control.
- Supply a tub of disinfectant, a brush for scrubbing footwear and a spray pump (not suitable for degassing disinfectants such as P3-oxonia active 150). Keep the disinfectant solution clean, renew it on a regular basis (daily).
- Take care that all surfaces are completely treated (recommended concentration!) during the cleaning- and disinfecting procedure. Follow the instruction regarding the recommended contact time.
- Pay attention of the personal hygiene (hand cleaning- and disinfection, boots- and safety cloth, etc.)
- Place company-own safety cloth at visitor disposal. Following the dirty laundry should be stored within a clothes laundry bag prior to the chemo-thermical treatment.
- Watch the material comparability prior to the usage of cleaning and/or disinfectants. A careful final rinse is recommended. If there is any doubt, please check the material comparability separately.
- Please wear protective clothing during the disinfecting actions (Safety training! Please pay attention to the information within the safety data and product information sheets).

5.2 Advantages of Formulated Disinfectants



The following advantages occur by the application of a formulated disinfectant compared to a single raw-material / active substance:

1. Surfactant containing products cause an even and efficient wetting also on difficult reachable surfaces such as curves or cracks. This effect is based on reduction of the surface tension of the water. As a result, present soils will effective removed respectively microbes efficient inactivated!
1. Most of single raw materials do not have these properties because they are not able to reduce the water tension. Hence, droplets take place and the space between these droplets is not cover by the active substance. In this case the inactivation of microbes will fail.
2. Suitable cleaning or disinfectants protect the surface in regard of the formation of scaling layers. The protection of this scaling-layers are very important, otherwise soils or microbes could rapidly re-growth on the surfaces. This makes cleaning and sanitizing procedures much more difficult.
3. Due to their special formulation, P3-products are easily and rapidly removable during the rinsing step.
4. The material comparability of P3-products is proofed (see information within the product data sheets). Especially in case of using formic acid, sodium hydroxide and/or peracetic acid corrosion could occur on many materials. These raw materials have a high corrosion potential. Due to this reason the usage to treat vehicles (o. a.) is not advisable.
5. The microbiological efficiency of the recommended P3-disinfectants is tested. The tests results confirm the effectiveness against present Fowl Plague Viruses. When used accordingly to the instructions on the hygiene plans the recommended procedures will certainty inactivate present virus.

During the cleaning and sanitising operations, especially when using high pressure systems, misting can occur. These aerosols produced consist of a fine water mist and the applied chemical. Inhalation of such aerosol mist must be avoided. Wearing a suitable respirator is imperative.

Please wear further suitable protective clothes during the treatment like safety glasses and tear proof rubber gloves. Sufficient airing is required. Please follow the instructions within the safety data sheets.

Ecolab GmbH & Co. OHG