FOSSIL SHIELD®

professional protection

Professional protection against the Red Poultry Mite in poultry production



Stops the Red Poultry Mite

Revolution in effectiveness



Works 12 x faster*



Protects up to 2 x longer*



Also adheres to oily surfaces*

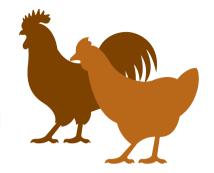
www.fossil-shield.de

Profi-Product overview

*compared to conventional diatomaceous earth products

Professional protection against the Red Poultry Mite in poultry production





The red poultry mite belongs to the arachnids and can grow to a length of up to 1 millimetre. It is found in almost every poultry population. In case of heavy infestation or lack of hosts, the mites also pose a serious problem for humans. The mites are grey, but turn grey-brown after feeding. The eggs of the red poultry mite are pale, almost transparent and about 0.4 millimetres in size.

Approximately 80 percent of poultry farms are affected by the red poultry mite.

Poultry farmers fear these bloodsuckers, because the tiny ectoparasites are hardly visible to the naked eye and difficult to control. For example, the red poultry mite has been observed to travel up to 30 metres to find new hosts. The red poultry mite is nocturnal and retreats into narrow crevices and cracks and open colonies during the day.

Fossil Shield[®] is hydrophobic (water-repellent) and remains fully effective even in environments with higher humidity. Natural diatomaceous earth is hydrophilic (water-attracting), which means that the active ingredient becomes saturated in

higher humidity and then only has a limited effect on the red poultry mite. It is thanks to this circumstance that, compared to diatomaceous earth, Fossil Shield® products with a very low percentage of active ingredient are more effective on the red poultry mite.

The carriers in Fossil Shield[®] products are for the most part silica of natural origin and are used exclusively for the even distribution of the active ingredient and therefore for application and active ingredient efficiency.

Effective immediately and long-lasting against red poultry mite.

Fossil Shield® products with synthetic amorphous silicon dioxide as the active ingredient have a purely physical effect. The mechanism of action sets in as soon as the parasites come into contact with the product and dust themselves with the silica. The evaporation-inhibiting protective layer of the parasitic insects is absorbed and the mites dessicate within a few hours.

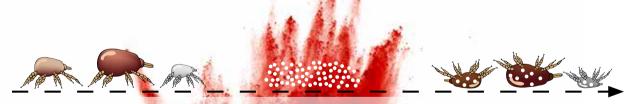
How does Fossil Shield® work?

Fossil Shield® products with synthetic amorphous silicon dioxide as the active ingredient have a purely physical effect. The mechanism of action sets in as soon as the parasites come into contact with the product and dust themselves with the silica. The evaporation-inhibiting protective layer of the parasitic insects is absorbed and the mites dessicate within a few hours.

The red poultry mite causes great economic damage.

- · anaemia
- · increased stress
- · a weakened immune system
- · behavioural disorders
- · reduced laying performance
- · weight loss

- · increased feed consumption
- transmission of pathogens such as diphtheria, avian cholera, etc.
- · inferior breeding results
- · aggressiveness all the way to cannibalism
- · anaemic death
- · loss of quality due to soiled eggs



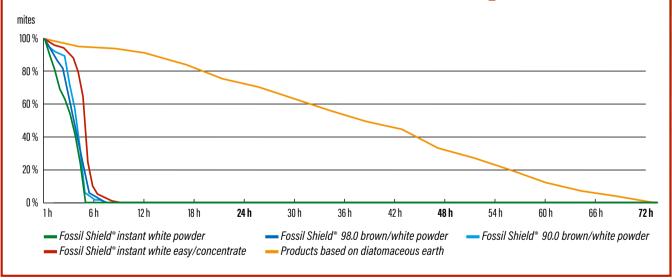
The mites come into contact with Fossil Shield® products on their way to the host animal and become dessicated.

Fossil Shield® products cause a physical absorption of lipids on the epicuticle of the mites. The wax layer that protects the mites from dessication is destroyed upon contact. The mites dehydrate and become dessicated. Fossil Shield® products have a long efficacy curve, which has the advantage that even parasites that hatch from the eggs weeks later are effectively killed.





Efficacy curve of Fossil Shield® products in comparison to conventional diatomaceous earth products.



Fossil Shield® products are effective against the red poultry mite in just a few hours, compared to up to three days with conventional diatomaceous earth products.

Typical mite hiding places 3 months after conventional treatment





The images show a facility coated with a conventional diatomaceous earth product. Significant mite infestation is already apparent after three months. This requires immediate action! We recommend speedy treatment with our Fossil Shield® products, which are very effective in highly humid areas due to their water-repellent properties and which are therefore ideally suited not only for prophylactic treatments, but also, as in this case, for follow-up treatments.



Fossil Shield® combats immediately 4 mite stages



Larvae



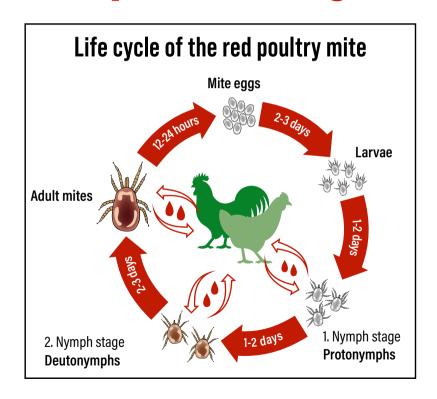
Protonymphs



Deutonymphs



Adult mites



The advantages of our Fossil Shield® products

Product

- · Works in just a few hours
- · Maximum yield and efficiency
- · In conformance with the EU biocide directive
- · No build-up of resistance
- Perfectly effective at high humidity

Animal

- · Prevents disease transmission
- · Combats feather-plucking
- · Reduced feed intake due to intact plumage
- · Consistent laying performance due to less stress
- · No blood on the eggs
- · More pleasant working conditions for the barn staff

Revolution in effectiveness



Works 12 x faster*



Protects up to 2 x longer*



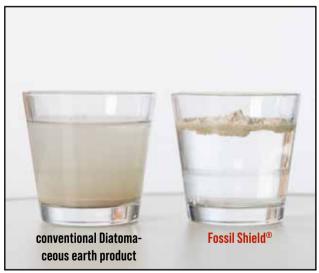
Also adheres to oily surfaces*

*compared to conventional diatomaceous earth products

Fossil Shield® products are hydrophobic



Fossil Shield[®] products are hydrophobic in different ways depending on their intended use.



Due to the water-repellent surface, Fossil Shield® works very well and quickly even in high humidity.



Fossil Shield® protects up to 2 x longer

Also adheres to oily surfaces

Protects longer because water repellent



Fossil Shield[®] instant white powder creates a particularly thick build-up at the mites' preferred hideouts and offers the animals little refuge.



In contrast, conventional diatomaceous earth products often create small courses of water, which provide the mites with numerous hideouts and routes to get to their host animals.

Accessories for our products



Order now in our shop.



Fossil Shield® mites mirror with led-lighting

Ideal for detecting hidden mite nests



Fossil Shield

protects against red mites

Effective immediately and longlasting against red poultry mites

Fossil Shield® instant white powder is a biocidal product (wettable powder WP) that can be suspended in water. It forms a strongly adhesive, chalking protective coating against red fowl mite suitable for any type of poultry farming.

Beneficial features:

Removable with water, dust-resistant and efficient application. Adequate protection from mite infestation throughout the laying period can be achieved by carrying out a thorough coating treatment procedure in the empty, cleaned and disinfected housing (possibly with re-treatment).

Holding systems with wood, plastic and metal parts are especially suitable.

Application

Stir the contents of the container with water according to the product label.

Duration of effect

Protects within a few hours and up to 2 x longer than conventional diatomaceous earth products.

Spreading technology

Use mobile vertical spray equipment or pressurevessel hose spray equipment of up to 150 m in length from Bein. Alternatively, spray equipment from e.g. Birchmeier, Ammer or Gloria or diaphragm pumps powered by compressed air.

Active ingredient

Synthetic, amorphous silicon dioxide (as a nanomaterial, consisting of aggregates and agglomerates); CAS: 68909-20-6 (Nano)

Active ingredient content 72 g / 1000 g

UFI: GJ13-E0Q3-200C-47SM



Liquid application Fossil Shield® instant white powder



FOSSIL SHIELD

protects against red mites

Effective immediately and longlasting against red poultry mites

Fossil Shield® instant white easy is a directly applicable suspension that, once dried, forms a strongly adhesive, chalking protective coating against the red poultry mite.

Beneficial features:

Removable with water, dust-resistant and efficient application. Adequate protection from mite infestation throughout the laying period can be achieved by carrying out a thorough coating treatment procedure in the empty, cleaned and disinfected housing (possibly with re-treatment).

Holding systems with wood, plastic and metal parts are especially suitable.

Application

No waiting time. Ready for use immediately. Simply spray directly into the mite hiding places or on their paths.

Duration of effect

Protects within a few hours and up to 2 x longer than conventional diatomaceous earth products.

Spreading technology

Small surfaces: Trigger sprayer, pump sprayer Large areas: Knapsack sprayer, pressurised tank

Active ingredient

Synthetic, amorphous silicon dioxide (as a nanomaterial, consisting of aggregates and agglomerates); CAS: 68909-20-6 [Nano]

Active ingredient content 7.8 g / 1000 g

UFI: D3CC-UODO-X000-KCY5



Fossil Shield® instant white easy Recommended for barns with up to 2000 animals Follow-up treatment Liquid application Container sizes · 25 I canister · 24 canister/pallet

Liquid application

Fossil Shield

protects against red mites

Effective immediately and longlasting against red poultry mites

Fossil Shield® instant white ultra is a water-soluble, directly applicable suspension concentrate for professional use only that, once dried, forms a strongly adhesive, chalking protective coating against the red poultry mite.

Beneficial features:

Removable with water, dust-resistant and efficient application. Adequate protection from mite infestation throughout the laying period can be achieved by carrying out a thorough coating treatment procedure in the empty, cleaned and disinfected housing (possibly with re-treatment).

Holding systems with wood, plastic and metal parts are especially suitable.

Application

No waiting time. Ready for use immediately. Simply spray directly into the mite hiding places or on their paths.

Duration of effect

Protects within a few hours and up to 2 x longer than conventional diatomaceous earth products.

Spreading technology

backpack sprayer, bunting sprayer, pressure sprayer, pressure containers, pressurised tank with a pressure of 1.5 - 4 bar

Active ingredient

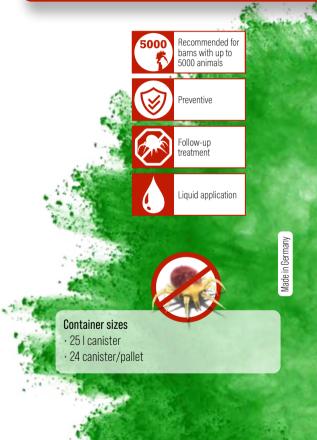
Synthetic, amorphous silicon dioxide (as a nanomaterial, consisting of aggregates and agglomerates); CAS: 68909-20-6 (Nano)

Active ingredient content 8 g / 1000 g

UFI: F8K8-Q051-N004-307N



Liquid application Fossil Shield® instant white ultra



FOSSIL SHIELD

protects against red mites

Effective immediately and longlasting against red poultry mites

Fossil Shield® instant white concentrate is a water-soluble suspension concentrate that, once dried, forms a strongly adhesive, chalking protective coating against the red poultry mite.

Beneficial features:

Removable with water, dust-resistant and efficient application. Adequate protection from mite infestation throughout the laying period can be achieved by carrying out a thorough coating treatment procedure in the empty, cleaned and disinfected housing (possibly with re-treatment).

Holding systems with wood, plastic and metal parts are especially suitable.

Application

Simply spray directly into the mite hiding places or on their paths.

Duration of effect

Protects within a few hours and up to 2 x longer than conventional diatomaceous earth products.

Spreading technology

backpack sprayer, pressure sprayer, pressurised tank with a pressure of 1.5 - 4 bar, trigger sprayer.

Active ingredient

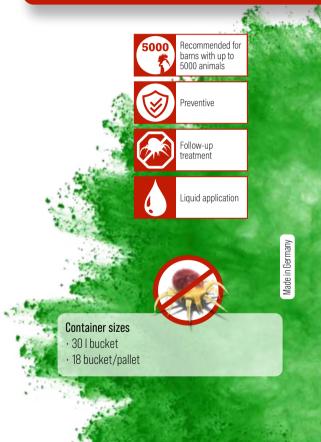
Synthetic, amorphous silicon dioxide (as a nanomaterial, consisting of aggregates and agglomerates); CAS: 68909-20-6 (Nano)

Active ingredient content 15,6 g / 1000 g

UFI: 3DT5-J0X2-C007-MMH4



Liquid application Fossil Shield® instant white concentrate



Fossil Shield

protects against red mites

Effective immediately and longlasting against red poultry mites

Fossil Shield® 90.0 white/brown powder is a biocidal product for application with electrostatic power-coating systems which, when applied correctly, can be used to control red poultry mites, even in occupied barns.

Beneficial features:

Easily removable with water. Adequate protection from mite infestation throughout the laying period can be achieved by carrying out a thorough coating treatment procedure in the empty, cleaned and disinfected housing (possibly with re-treatment).

Holding systems with wood, plastic and metal parts are especially suitable.

Application

No waiting time. Ready for use immediately. Simply spray directly into the mite hiding places or on their paths.

Duration of effect

Protects within a few hours and up to 2 x longer than conventional diatomaceous earth products.

Spreading technology

With electrostatic powder-coating systems from Bein GmbH. Alternative: e.g. www.nordson.com

Active ingredient

Synthetic, amorphous silicon dioxide (as a nanomaterial, consisting of aggregates and agglomerates); CAS: 68909-20-6 (Nano)

Active ingredient content 45 a / 1000 a

Fossil Shield® 90.0 white powder: UFI: EY3F-Y0M0-600V-2RPP

Fossil Shield® 90.0 brown powder: UFI: FTVH-30TY-G00S-K4E6



Fossil Shield

protects against red mites

Effective immediately and longlasting against red poultry mites

Fossil Shield® 98.0 white/brown powder is a biocidal product for professional use only and, when applied correctly, can be used to control red poultry mites, even in occupied barns.

Beneficial features:

Removable with water, efficient application. Adequate protection from mite infestation throughout the laying period can be achieved by carrying out a thorough coating treatment procedure in the empty, cleaned and disinfected housing (possibly with re-treatment).

Holding systems with wood, plastic and metal parts are especially suitable.

Application: Dry: No waiting time. Ready for use immediately. Simply spray directly into the mite hiding places or on their paths. Liquid: Stir the contents of the container with water according to the product label.

Duration of effect: Protects within a few hours and up to 2×1000 km conventional diatomaceous earth products.

Spreading technology: Dry: Blue Jet battery sprayer (Fossil Shield®), backpack blower (e.g. STIHL ST 450), RTK cavity sprayer, dust gun (Birchmeier Bobby). Liquid: battery backpack sprayer, pressure tank, Gloria pressure sprayer, bunting sprayer, 1-4 bar pressure.

Active ingredient: Synthetic, amorphous silicon dioxide (as a nanomaterial, consisting of aggregates and agglomerates); CAS: 68909-20-6 (Nano)

Active ingredient content: 20 g / 1000 g

Fossil Shield® 98.0 white powder UFI: 6PNM-801X-S00N-2H40

Fossil Shield® 98.0 brown powder UFI: VHEQ-D08X-200H-JVV7



FOSSIL SHIELD

protective cleaning and disinfection

Fossil Shield® Duo Des Kok is a two-component special disinfectant for antiparasitic and antimicrobial disinfection. It is used to combat parasite stages such as coccidia, cryptosporidia, roundworm eggs, bacteria and fungi as well as mycobacteria (including TB pathogens) in stables (calves, cattle, laying hens, as well as fattening and breeding farms for pigs and poultry), but also for animal transporters.

Beneficial features:

Effective against bacteria, fungi, coccidia, cryptosporidia and roundworm eggs in just one step. Free of chlorocresol and formaldehyde. ,Duo Des Kok' complies with the regulations of the Washing and Cleaning Agents Act. The organic components are biodegradable.

Application: Mix components A + B in a ratio of 1:1. Fill up the mixture with water according to the dosage table.

Spreading technology: Foam lance, fogging device, disinfection trolley, backpack sprayer

Active ingredient: 2-Hydroxybiphenyl, formic acid, peroxyacetic acid, organic acids, organic solvents, hydrogen peroxide

Active ingredient content: 100g component A contains 30g biphenyl-2-ol and 2.5g formic acid anionic surfactants, glycol, solubiliser.
100g component B contains 5.0g peracetic acid bleaching agents, acids.

UFI Komponente A: 0YXM-U0XD-A4HW-WP13

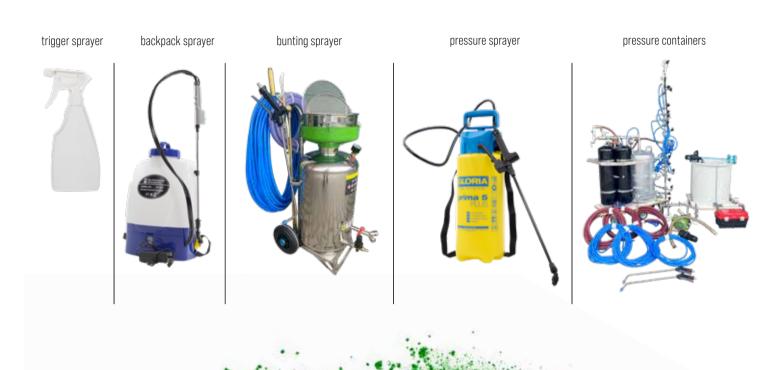
UFI Komponente B: TDPH-9134-84HP-EV3W



Spreading technique for dry application



Spreading technique for liquid application





Your expert for professional protection against the red poultry mite in poultry farming.

FOSSIL SHIELD®

protects against red mites

www.fossil-shield.de

Telephone: +49 (0) 66 72 - 92 33 0 Email: info@bein-gmbh.de www.fossil-shield.de

Made in Germany