# Acarism

### In Flour

- It acts as flour improver \*
- Easy application
- Cost-Effective
- 100% Natural Mineral (HQI\*)
- Commodity protection
- Facility Protection
- "Clean Label" Solution
- High quality ingredients
- Functionalized and micronized
- Multiple industrial applications
- Active and heat-resistant
- Adaptable to all consumption
- Excellent cost-efficiency
- multiple Functionality
- Allows to balance different qualities of flour \*
- Allows the reduction of sodium \*
- Get better performance machine \*
- Improved working with the dough
- Optimizes the production process \*
- It adds flavor to processed (i.e.: using flavored ACARISIN TM) \*
- Optimizes the color and texture of the crumb and crust. \*
- It allows to extend the freshness of processed and ellaborates. \*

\* Based on dose and product function. For example ACARISIN TM Malted, reduction products, reduction / adjustment yeast/leaven/ Low water activity are some of the features derived from the incorporation of TM ACARISIN

ACARISIN™

MAXIMUM PERFORMANCE AND

EFFICIENCY

# ND<sup>Pharma & Biotech</sup> GOING GREEN WITH THE PLANET



ACARISIN TM is the effective alternative for the prevention, treatment and protection of flours and semolina of all kinds without the need for pesticides or chemical insecticides and active ingredients whose residues remain attached to the surface of products, creating problems of health, safety and hygiene food.

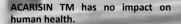
ACARISIN TM is a product based on mineral salts in food grade, edible and safe, proven degree.

ACARISIN TM adds functionality to flour milled and providing them with added value beyond the mere protection against mites and insects hatch.



www.ndpharmabiotech.com

The formulated powder with nutrients and minerals combines fungicidal, insecticide and miticide activity. It is free of neurotoxic substances and provides sufficient protection to food commodities.



ACARISIN TM is the ultimate solution to the problem of mites due to its dual action. At one hand prevents the growth of mites within and other friendly insects within flour. Applicable in the raw material and pre-mix, dry, dehydrated, dried, fresh and processed food and nutrition provides an added value ACARISIN other "additives" are not having.

Effective in the fight against the spread and dissemination of pollution by certain types of mites that also can contaminate processed items and raw materials in the terminal places, outlets, such as warehouses, logistic platforms just before they are to be consumed by humans or animals.

Prevents the hatching of the eggs, and leaving the insect destroys transformed into a protein biological activity and rest without perfectly edible and even nutritious, thanks to the transformation that operates on living organisms of this type.

The death of adults and larval parasite stages occurs between 1-14 days, with the possibility of being applied as often as necessary and at different both in a preventive and therapeutic indication.















The ingredients ACARISIN TM are salts and minerals of high quality and natural extraction, authorized for use in flour and semolina.

## In Flour

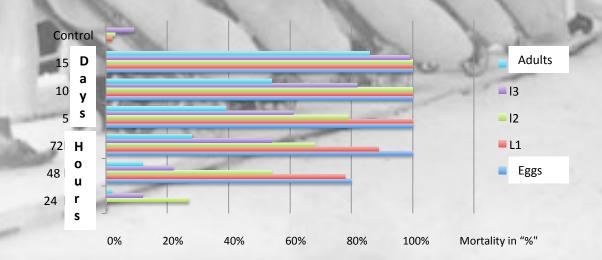
In randomized studies, ACARISIN™ has demonstrated a high level of effectiveness against any other existing alternative to pesticides, miticides and chemical insecticides compared to the advantages and disadvantages of conventional biocides, which the permitted levels in human food, showed divergent results the growth test against ACARISIN ™

ACARISIN™ was tested in different species that attack flours and derivatives, in addition to other species by routine testing which involved placing 10 grams of powder (ACARISIN™) at the bottom of a petri dish together with 50 pcs. Insect on each stage of the reviewed from eggs to adults, along with their food.

It has been obtained a score of 100% mortality (14 days) in adult mite, and 100% in eggs and stages of L1, L2 and L3. (From 48 hours and depending on the doses used). Protection on flour versus hatching eggs or emergence of new insects lasted for more than six months in optimal conditions.

Insects in the study were selected at different stages along with enough to ensure their survival for at least 15 days food. The control group in this case consisted mite in different states and supporting food, no agent.

A more pronounced after 48 hours according to the graph, especially the most sensitive insect stadiums, eggs and larval stages mortality was observed. After 72 hours, the overall mortality stood at an average of around 65% to 100% between 9 and 14 days of exposure to the product, in the aforementioned conditions



#### ND Pharma & Biotech

ND Pharma & Biotech Co. is a Biopharmaceutical and Chemical Company focused on the rapid development and effective solutions for the industry in various fields from health, medicine, food and nutrition, agriculture and others. As a research company has developed a significant portfolio of innovative solutions designed and realized by a very competent team of high researchers and important ties to the industry profile.

ND Pharma & Biotech markets its products through an established commercial companies and with the cooperation of agents, distributors and other kind of business representatives, commercial network and international presence to ensure fast and efficient service.

#### **ND** Innovation

Division I + D + i of ND Pharma & Biotech is responsible of developed research and innovation on behalf of ND Pharma & Biotech.

