Antibacterial cutting edge Enhanced for tomorrow's industry

- Antibacteria Masterbatches
- Antifungal Masterbatches
- Anti-mold Masterbatches

For Polyolefin Polymers For Silicones For Elastomers For Hygiene and Protection





The effectiveness of L&G's "BACT" technology has been certified by accurate scientific tests carried out by prestigious Italian universities on behalf of our customers.

In this particular case, the use of L & G Masterbatch allowed the elimination of the 99,9% of Salmonella, E. Coli, Listeria and Legionella in 24 hours.



FOOD





The Product: ADM-BACT-24-FC **AVAILABLE AS MASTERBATCH AND AS ACTIVE SUBSTANCE**

Abstract:

It is a mixture composed of polyethylene and additives completely insoluble in water with zero migration. The mechanism of action of ADM-BACT-24-FC has as its primary function the removal of microbacteriological charges. Microbial development is controlled by an ingredient composed of spheres of very pure silica containing Silver. Silica has an interesting property, it keeps the metal as an ion. The combination of this property has made it possible to create silica with low chemical inertia, which can retain antimicrobial metal ions such as silver. The size of this ingredient is micrometric, its peculiarity is that it gradually releases Ag+ ions. The silver ion has the ability to bind strongly to the cellular enzyme of microbes and to inhibit the enzymatic activity of the cell wall, membrane and nucleic acids, which denature in contact with the surface of the package.

Uses:

Inhibits the growth of microorganisms that cause stains, odors or product degradation, including degradation of physical properties in all polyolefin polymers. ADM-BACT-24-FC is suitable for both injection molding and extrusion of products that must come into contact with drinking water. Tests carried out on EPDM Peroxide according to UNI EN 13130-1:2005 demonstrate the specific migration of Silver in 3% acetic acid of 0.0010 mg/kg, while tests carried out according to UNI EN 13130-1:2005 on NBR of 0.0001 mg/kg.

Compliance:

The biocidal principles contained in this mixture are authorized by EU regulation no. 528/2012 of which art.95. the product can be used in Pt. 2, 4, 7, 9. (BRP-ECHA) **Dosage:**

From 3% to 5% of ADM-BACT-24-FC masterbatch depending on the desired performance. Do not exceed the recommended dosage. The suggested application levels are based on laboratory evaluations and are typical for the specific areas of use. In multilayer films it is recommended to dose the masterbatch only on the layer/layers where the bactericidal effect must be obtained.



FOOD CONTACT **MEDICALS DRINKING WATER TEXTILES APPLIANCES**

SECTORS OF USE (BRP-ECHA)

PT 2 - Disinfectants and algaecides not intended for direct application to humans or animals:

Used for the disinfection of surfaces, materials, equipment and furniture which are not used for direct contact with food or feeding stuffs. Usage areas include, inter alia, swimming pools, aquariums, bathing and other waters; air conditioning systems; and walls and floors in private, public, and industrial areas and in other areas for professional activities. - Used for disinfection of air, water not used for human or animal consumption, chemical toilets, waste water, hospital waste and soil. -Used as algaecides for treatment of swimming pools, aquariums and other waters and for remedial treatment of construction materials. - Used to be incorporated in textiles, tissues, masks, paints and other articles or materials with the purpose of producing treated articles with disinfecting properties.

PT 4 - Food and feed area:

Used for the disinfection of equipment, containers, consumption utensils, surfaces or pipework associated with the production, transport, storage or consumption of food or feed (including drinking water) for humans and animals. Used to impregnate materials which may enter into contact with food.











Abstract:

It is a mixture composed of polyethylene and additives completely insoluble in water with zero migration. The mechanism of action of ADM-BACT-08 has as its primary function the removal of micro-bacteriological charges. Microbial development is controlled by an ingredient composed of spheres of pure silica containing Silver. Silica has an interesting property, it retains the metal as an ion. The combination of this property has made it possible to create silica with low chemical inertia, which can retain antimicrobial metal ions such as silver. The size of this ingredient is micrometric, in the presence of humidity, this structure gradually releases some Ag+ ions. The silver ion has the ability to bind strongly to the cellular enzyme of microbes and to inhibit the enzymatic activity of the cell wall, membrane and nucleic acids, which denature in contact with the surface of the package. It has a strong anti-mold action. Zinc Pyrithione is an antibacterial par excellence, suppressing the growth of algae, bacteria, fungi, mold and yeast in treated articles. It inhibits the growth of microorganisms that cause stains, odors or product degradation, including degradation of the physical properties of rubber (such as natural rubber, silicone and other compound elastomers), styrene-based polymers (such as acrylonitrile butadiene, polystyrene, styrene acrylonitrile and others) and plastic resins and mixtures, including but not limited to vinyl chloride-vinyl acetate copolymers, polyurethanes, polyamides, polyolefins, polyesters, polycarbonate and acrylonitrile copolymers.

Compliance:

The biocidal principles contained in this mixture are authorized by EU regulation no. 528/2012 of which art. 95. the product can be used in PT. 7, 9. (BRP-ECHA) **USE:**

From 3% to 6% of masterbatch depending on the desired performance. In multilayer films it is recommended to dose the masterbatch only on the external layer(s) where the bactericidal effect must be obtained.

Can be used as an antibacterial and anti-mold additive in paints, varnishes, fabrics and leather.

PT 7 Prod main adhe PT 9 Prod cont micr pres



The Product: ADM-BACT-08



AVAILABLE AS MASTERBATCH AND AS ACTIVE SUBSTANCE

SECTORS OF USE (BRP-ECHA)

PT 7 - Film preservatives:

Products used for the preservation of films or coatings by controlling microbial deterioration or algal growth in order to maintain the original properties of the surface of materials and objects such as paints, plastics, sealing materials, wall adhesives, binders, paper, art objects.

PT 9 - Fibre, leather, rubber and polymerized material preservatives:

Products used for the preservation of fibrous or polymerized materials such as leather, rubber, paper or textile products by controlling microbiological deterioration. This type of product includes biocides that counteract the deposition of microorganisms on the surface of materials and therefore inhibit or prevent the development of unpleasant odours and/or present other types of benefits.







Abstract:

It is the ideal masterbatch for the refrigeration industry for the production of refrigerator gaskets that do not deteriorate due to microbiological and microfungal loads. Ideal for gaskets in the automotive sector, your car will always have perfect gaskets. The ADM-EVA-F125 EVA-based Masterbatch is a 10% dispersion of TBZ and IPBC in olefinic copolymer. It is a biocide with fungicidal function even at low dosages. Fields of Use:

ADM-EVA-F125 is recommended in all transformations of olefinic polymers and PVC to control the growth of fungi and bacteria on the surface of the final products, without interfering with the optical characteristics. Heat-stable formulation.

Compliance:

The biocidal principles contained in this mixture are registered and Authorized by EU regulation no. 528/2012 of which art. 95 of the regulation On biocidal products (BPR). the product can be used in PT. 7, 8, 9 and 10. **USE:**

Add in mass from 1% to 3%. Do not exceed the recommended dosage. Usable as an additive in varnishes and paints.

AVAILABLE AS MASTERBATCH AND AS ACTIVE SUBSTANCE





