Globalflor®

OHST

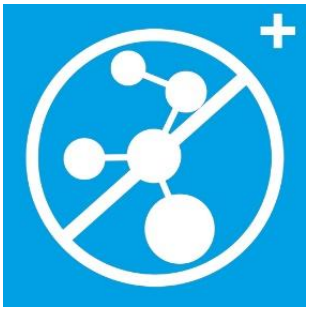
ORGANIC HARMLESS STERILIZATION TECHNOLOGY

GLOBALFLOR INTERNATIONAL LTD

4TH JULY 2025

ABOUT OHST

OHST is supported by a kind of harmless organic sterilizing agent, can kill hundreds of germs like Aspergillus niger ATCC 9642, Penicillium pinophilum ATCC 11797, Aureobasidium pullulans ATCC 15233, Chaetomium Globosum ATCC 6205, Trichoderma virens ATCC 9645, Staphylococcus aureus ATCC 6538, Klebsiella pneumoniae ATCC 4352 and Pseudomonas aeruginosa ATCC 9027. This liquid has got the certificate from United States Environmental Protection Agency, superior to Nano-sliver.



THE BEST MILDEW-PROOF SOLUTION

TEST ORGANISM(S) ASTM G 21-13	**CONCENTRATION OF SPORES (SPORES/ML)**	**LEVEL (AFTER 28 DAYS)**
Aspergillus niger ATCC 9642 Penicillium pinophilum ATCC 11797 Aureobasidium pullulans ATCC 15233 Chaetomium Globosum ATCC 6205 Trichoderma virens ATCC 9645	$1.0*10^6$	**0 Grade***

NOTE

1. According to ASTM G 21-13 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi, observed fungi growth rating on the specimens include:

0 – Non Growth
1 – Traces of growth (less than 10%)
2 – Light growth (10%~30%)
3 – Medium growth (30%~60%)
4 – Heavy growth (60% to complete coverage)

2. *The microscopes (50 X) were used to confirm the observation

THE BEST ANTI-MICROBIAL SOLUTION

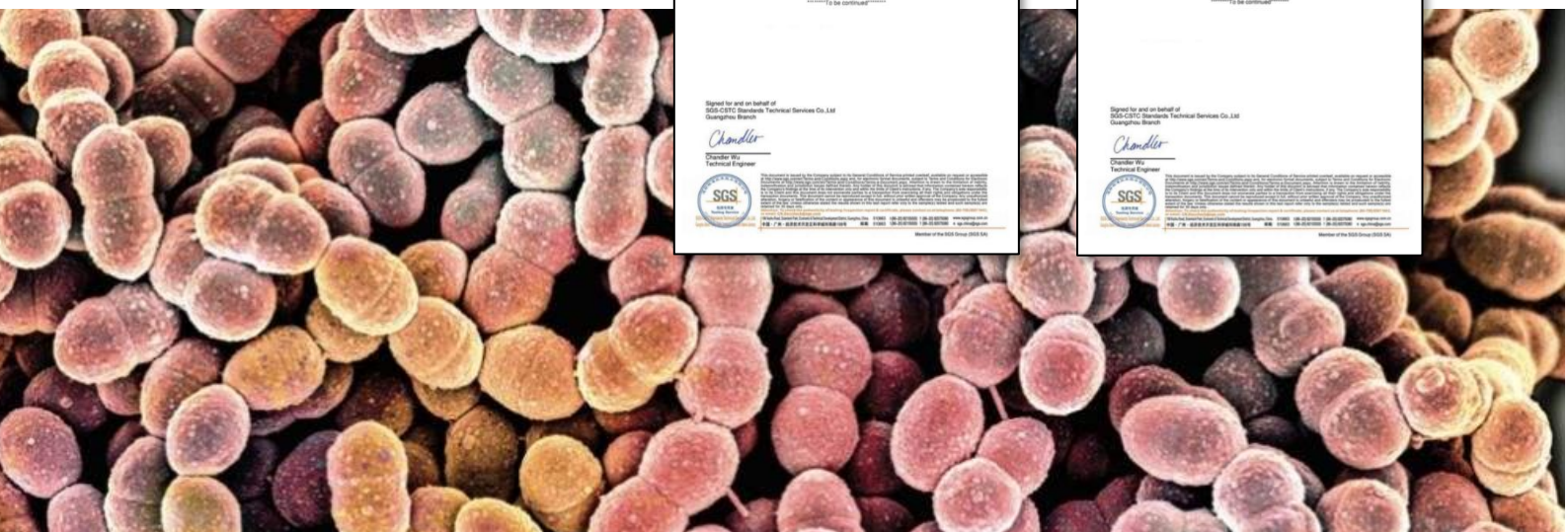
NAME OF TEST BACTERIA (STRAIN NUMBER) ASTM E 2180-07	CONCENTRATION OF BACTERIA (CFU/ML)	/	THE ANTILOG OF THE GEOMETRIC MEAN OF THE NUMBER OF ORGANISMS RECOVERED FROM "0H" (CFU/ML)	THE ANTILOG OF THE GEOMETRIC MEAN OF THE NUMBER OF ORGANISMS RECOVERED FROM "24H" (CFU/ML)	REDUCTION
Staphylococcus aureus ATCC 6538	$1.5*10^5$	Sample	/	$<5.0*10^1$	>99.9%
		Control sample	$1.0*10^6$	$4.6*10^7$	
Klebsiella pneumoniae ATCC 4352	$3.5*10^5$	Sample	/	$<5.0*10^1$	
		Control sample	$1.9*10^6$	$2.3*10^7$	
Pseudomonas aeruginosa ATCC 9027	$3.1*10^5$	Sample	/	$<5.0*10^1$	
		Control sample	$1.0*10^6$	$7.1*10^7$	


SGS

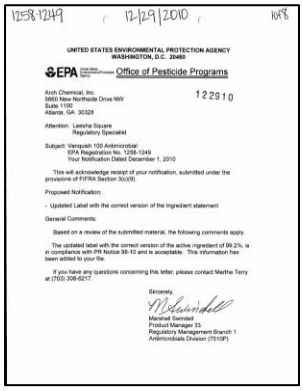
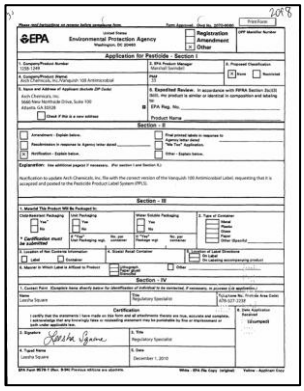
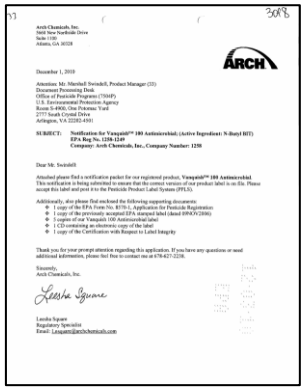
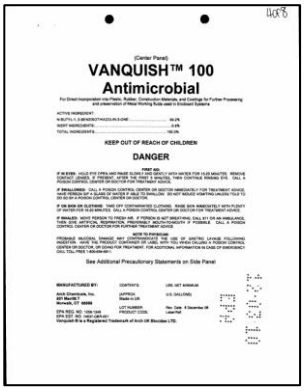
TEST REPORT

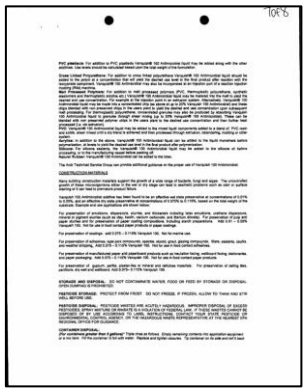
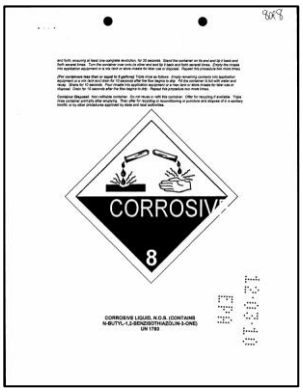

SGS

TEST REPORT



EPA CERTIFICATE

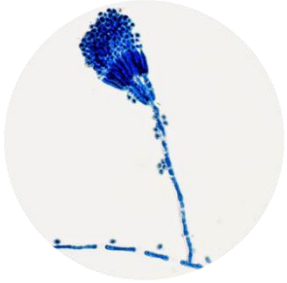
BACTERIA & MYCETE BRIEF INTRODUCTION

ASPERGILUS NIGER

The fungus Aspergillus niger is a type of mycete, which can sometimes be attributed to the cause of some cases of pneumonia. It is also the causative agent of “black mycete” on the outsides of certain foods, such as apricots, onions, grapes, etc - therefore making Aspergillus niger a food “spoilage” organism.

These are classed as “Conidiophores” - an organism which forms filaments or hyphae, otherwise known as conidia (the a-sexual method of fungal reproduction). The name “Aspergillus” comes from the Latin word “aspergillum”, which roughly translates to “holy water sprinkler”, referring to the shape of these sprinklers being very similar to how these fungi appear when viewed under a microscope.

Digital illustration of fungi Aspergillus niger, black mold, which produce aflatoxins, cause pulmonary infection aspergillosis.

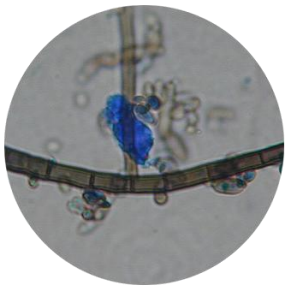


PENICILIUM PINOPHILUM

Penicillium pinophilum is a species of fungus in the genus Penicillium which was isolated from a radio set in Papua New Guinea.

Penicillium pinophilum produces 3-O-methylfunicone and mycophenolic acid.

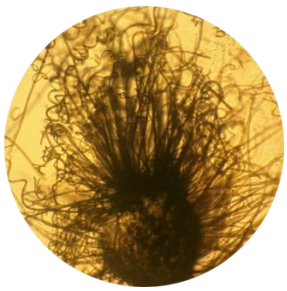
As the only known thermally dimorphic species of Penicillium, it can cause lethal systemic infection (penicilliosis) with fever and anaemia similar to disseminated cryptococcosis.



AUREOBASIDIUM PULLULANS

Aureobasidium pullulans is a ubiquitous black, yeast-like fungus that can be found in different environments (e.g. soil, water, air and limestone). It is well known as a naturally occurring epiphyte or endophyte of a wide range of plant species (e.g. apple, grape, cucumber, green beans, cabbage) without causing any symptoms of disease. A. pullulans has a high importance in biotechnology for the production of different enzymes, siderophores and pullulan. Furthermore, A. pullulansis used in biological control of plant diseases, especially storage diseases.

Chronic human exposure to A. pullulans via humidifiers or air conditioners can lead to hypersensitivity pneumonitis(extrinsic allergic alveolitis) or "humidifier lung". This condition is characterized acutely by dyspnea, cough, fever, chest infiltrates, and acute inflammatory reaction. The condition can also be chronic, and lymphocyte-mediated. The chronic condition is characterized radiographically by reticulonodular infiltrates in the lung, with apical sparing. The strains causing infections in humans were reclassified to Aureobasidium melanogenum.



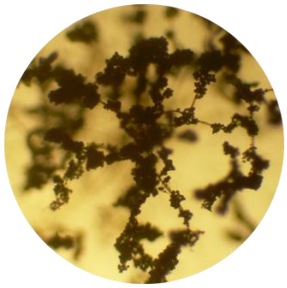
CHAETOMIUM GLOBOSUM

Chaetomium globosum is a well-known mesophilic member of the mold family Chaetomiaceae. It is a saprophytic fungus that primarily resides on plants, soil, straw, and dung. Endophytic C. globosum assists in cellulose decomposition of plant cells. They are found in habitats ranging from forest plants to mountain

soils across various biomes. C. globosumcolonies can also be found indoors and on wooden products.

Like most Chaetomium species, C. globosum decomposes plant cells using hyphal cellulase activity.Even though they are known to cause soft rot rather than brown rot, C. globosum plant decomposition leaves behind lignin residues.They can decay a variety of wood types such as aspen and pine and even change the colour of paper and books.

C. globosum colonies are potential allergens, and when residing on damp buildings, they are usually the casual agents of poor indoor air quality. Colonies can be detected on wet building wood and also on tiles. Even though spores are usually not detected in the air, inhalation can trigger allergic response and respiratory illnesses.



TRICHODERMA VIRENS

Trichoderma is a genus of fungi in the family Hypocreaceae, that is present in all soils, where they are the most prevalentculturable fungi. Many species in this genus can be characterized as opportunistic avirulent plant symbionts. Trichoderma species are frequently isolated from forest or agricultural soils at all latitudes.

The genus was described by Christiaan Hendrik Persoon in 1794, but the taxonomy has remained difficult to resolve. For a long time it was considered to consist of only one species, Trichoderma viride, named for producing green mold.

T. aggressivum (formerly T. harzianum biotype 4) is the causal agent of green mold, a disease of cultivated button mushrooms. Trichoderma viride is the causal agent of green mold rot of onion. A strain of Trichoderma viride is a known cause of dieback of Pinus nigra seedlings.

STAPHYLOCOCCUS AUREUS

Staphylococcus aureus (or Staph aureus) is a type of bacteria commonly found on the skin and hair as well as in the noses and throats of people and animals. These bacteria are present in up to 25 percent of healthy people and are even more common among those with skin, eye, nose, or throat infections. The percentages are higher for people who are patients in a hospital or who work there.

The bacteria can spread from person to person by direct contact, through contaminated objects (such as gym equipment, telephones, door knobs, television remote controls, or elevator buttons), or, less often, by inhalation of infected droplets dispersed by sneezing or coughing.

Staphylococcus aureus is the most dangerous of all of the many common staphylococcal bacteria. These gram-positive, sphere-shaped (coccal) bacteria often cause skin infections but can cause pneumonia, heart valve infections, and bone infections.

KLEBSIELLA PNEUMONIA

Klebsiella pneumoniae is a Gram-negative, non-motile, encapsulated, lactose-fermenting, facultative anaerobic, rod-shapedbacterium. It appears as a mucoid lactose fermenter on MacConkey agar.

Klebsiella pneumoniae (K. pneumoniae) are bacteria that normally live in your intestines and feces. These bacteria are harmless when they're in your intestines. But if they spread to another part of your body, they can cause severe infections. The risk is higher if you're sick. They can turn into “superbugs” that are almost impossible to fight with common antibiotics. The germs can give you pneumonia, infect your wound or blood, and cause other serious problems.

PSEUDOMONAS

Pseudomonas is a type of bacteria that can cause infections. Pseudomonas is a common genus of bacteria, which can create infections in the body under certain circumstances.

There are many different types of Pseudomonas bacteria. Only a few types can cause an infection. Pseudomonas bacteria tend to live and breed in water, soil, and damp areas. The warmer and wetter it is, the better the conditions are for the bacteria to multiply.

People who are in the hospital for surgery or treatment for a major illness are most vulnerable to this kind of infection. An incision from a surgical procedure or an open wound can increase the risk of infection. The bacteria can also invade pressure wounds, or bed sores.