

A preservative bacteriostatic agent for use in the manufacture of polymer plastic and latex products

# MICROBAN® Plastic Additive "B"

### Directions for Use

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

This additive is to be used only for compounding of proprietary and/or patented resin formulations under written agreement and in accord with specific instructions issued by Microban Products Company. Specific directions for reformulation will be found in technical bulletins supplied by Microban Products Company.

### Storage and Disposal

Container: Metal or Plastic or Fiber  
Size: Various Chemical: Organic

#### 1. Prohibitions

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

#### 2. Disposal

Rinsate should be disposed of in a landfill approved for chemicals or buried in a safe place away from water supplies.

### 3. Container Disposal

- a) Recycle, if necessary, and offer for sale.
- b) If recycling is not possible, the container must be emptied, cleaned, and disposed of in a safe place.

### 4. General

Obtain Federal Hazardous Waste Agency Approval for shipment of material.

### Precautionary Statements

#### Hazard to Humans

DANGER: Irritant. Causes eye and skin damage. Do not get in eyes, on skin, or on clothing. Avoid breathing dust. If in contact with a liquid, get it off. Wash exposed areas with water. If swallowed, seek medical attention immediately. Do not eat, drink, or smoke while working with this material.

### Active Ingredient

2,4-Dichloro-2',4'-biphenoxy phenol... 99%  
Inert Ingredient... 1%

### First Aid

In case of contact with skin or eyes, flush with plenty of water for at least 15 minutes and call a physician. If swallowed, drink promptly a large quantity of water and white gelatin solution or if these are not available, drink large quantities of water. Avoid further medical attention.

### Note to Physician

Probably mucosa damage may contraindicate the use of gastric lavage.

### Environmental Hazard

This product is toxic to fish and wildlife. Do not discharge into lakes, streams, ponds or public waterways or discharge with a NPDES permit. For information contact your Regional Office of the EPA. Do not contaminate water by cleaning, maintenance and disposal of this product. Apply this pesticide only as directed on this label.

Microban Products Co.  
1060 Northwest Dr., P.O. Box 1015  
Wilmington, NC 27102  
EPA No. 42182-1

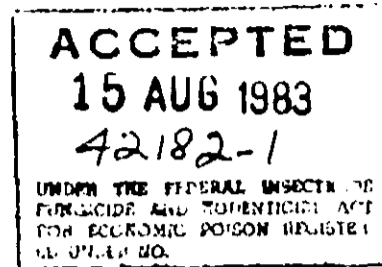
**DANGER**  
KEEP OUT OF REACH OF CHILDREN

**ACCEPTED**

15 AUG 1983

42182-1

UNDER THE FEDERAL INSECTICIDE ACT  
REGISTERED AND FOR RESALE ONLY  
FOR EXPORT TO FOREIGN COUNTRIES  
EPA OFFICE NO.



# Microban Products

## TECHNICAL BULLETIN FOR PRODUCTION OF MICROBAN CONCENTRATES

To be used only for compounding of proprietary and/or patented resin formulations under agreement with Microban Products Co.

### NOTICE

Since this is a very expensive chemical, procedures should be established in handling to minimize dusting.

### PRECAUTIONARY STATEMENTS

#### Hazard to Humans

**Danger:** Corrosive. Causes eye and skin damage. Do not get in eyes, on skin, or on clothing. Avoid breathing dust. Use with adequate ventilation. Wear goggles or face shield and rubber gloves when handling. Harmful or may be fatal if swallowed.

**First Aid:** In case of contact with skin or eyes, flush with plenty of water for at least 15 minutes and call a physician. If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol and call a physician.

**Note to Physician:** Probably mucosal damage may contraindicate the use of gastric lavage.

#### ENVIRONMENTAL HAZARD

This product is toxic to fish and wildlife. Do not discharge into lakes, streams, ponds or public waters unless in accordance with a NPDES permit. For guidance contact your Regional Office of the EPA. Do not contaminate water by cleaning of container and equipment or disposal of wastes. Apply this pesticide only as specified on this label.

### DIRECTIONS FOR USE, PRODUCTION OF CONCENTRATE

Containers of Additive "B" are opened and proper amount of Additive is weighed under a dust hood which reduces toxic dust to less than 50 micrograms per cubic meter.

The mixing may be vented or not as long as the dust is controlled to less than 50 micrograms per cubic meter in the surrounding atmosphere. The resin to be compounded with the Additive "B" is in pellet form. The pellets are placed in a mixing drum. Mineral oil is added and the drum revolves to coat the pellets. The Additive "B" is slowly and carefully placed into the drum to avoid dusting. The drum is closed and revolves causing the Additive "B" to coat the pellets. This operation eliminates all dry particles of Additive. The coated pellets are melted, extruded and re-pelletized. At this point, the compounded material is a resin concentrate having a high percentage of Additive. The resin concentrate is specified at 10% by weight (10% Additive, 90% base resin).



#### PRODUCTION OF END PRODUCT

In the subsequent extrusion of film, yarn or fiber or in molding finished shapes, the pellets (concentrate) are then metered into a larger quantity of base resin, at a specified let-down ratio to provide the desired level for the end product. The level of Additive to be incorporated varies according to the nature of the product and the desired duration of the antibacterial capability. In the case of the currently proposed end products (see separate listing), the level of Additive is specified in the range of 0.5 - 1.0% by weight.

Throughout this procedure, operators should use protective gloves and respirators. All refuse should be put into drums and incinerated in accordance with EPA regulations.

All containers of finished Microban concentrates must bear the appropriate labels which are furnished by Microban Products Co.

#### PHYSICAL AND CHEMICAL PROPERTY OF ACTIVE INGREDIENT

##### VOLATILITY

Measured by differential thermal analysis, Microban Plastic Additive "B" does not decompose below 280-290°C. Volatilization may occur at elevated temperature.

##### STABILITY

Microban Plastic Additive "B" does not decompose under normal storage conditions and its thermal stability is excellent.

##### LEACHABILITY

Microban Plastic Additive "B" is practically insoluble in water. The solubility of Microban Plastic Additive "B" is 0.0010 g/100g in water at 20°C and 0.0039 g/100g in water at 50°C.

MICROBAN PRODUCTS CO.  
P. O. Box 1015  
Winston-Salem, N.C. 27102



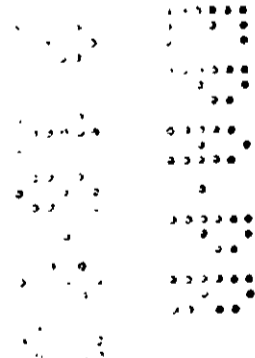
Addendum to 2/8/83 letter to A.E. Castillo

List of Products which we were advised contain Irgasan DP-300. Level of Additive:  
0.1 - 0.15% by weight

<u>ITEM</u>	<u>MANUFACTURER</u>	<u>BRAND NAME</u>
<u>Apparel</u>		
Dresses	Stevens Wonder Bond <sup>®</sup> Tricot	
Dresses	Parfait Originals, Abaco Fabric Corporation	
Linings & Trimmings	Botany 500	
Fabric for Apparel	Gold Mills	
General Wear	Mondor Apparel	
Running Gear	Elbe Products	
Athletic Shirts	Jockey	
Women Racketball Apparel	Ektelon	
Men's Tennis Apparel	John Newcombe by Harvey Woods	
General Ski Apparel & Equipment	Bauer	
<u>Hosiery</u>		
Support Socks	Burlington	Activ-8
Entire Line of Socks	Munsingwear	Grand Slam
General Hosiery	Mondor	
Tennis Hosiery	John Newcombe by Harvey Woods	
Socks and Shoe Insoles	Hush Puppies	
<u>Carpets &amp; Rugs</u>		
Rugs	Perfect Fit	
Carpets	Hollytex Carpet Mills	
Carpets	Peters Carpets Ltd.	Constellation
Rugs	Michelle Bath	

**ACCEPTED**  
**15 AUG 1983**  
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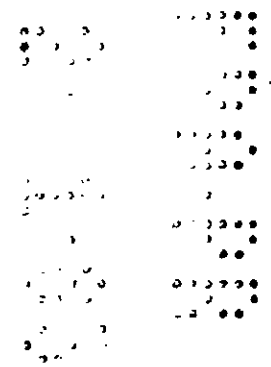
UNDER THE FEDERAL INSECTICIDE  
 FUNGICIDE AND RODENTICIDE ACT  
 FOR ECONOMIC POISON REGISTRATION  
 ED UNDER NO.





LIST OF MICROBAN END PRODUCTS

<u>% of Additive by Weight</u>	<u>Product</u>
0.5%	<u>Polyethylene or Polypropylene Film</u> garment bags
0.5%	<u>Vinyl Film</u> garment bags
0.5%	blanket bags
0.5%	cubicle curtains
1.0%	<u>Nylon Fiber, Yarn or Filament</u> toilette bowl brush
1.0%	<u>Vinyl Mastic</u> tub and tile caulking
0.5%	<u>Nylon Fabric</u> window curtains
0.5%	shower curtains
0.5%	cubicle curtains





Addendum to 2/8/83 letter to A.E. Castillo

ADDITIONAL LIST OF MICROBAN® END PRODUCTS

Polypropylene, Nylon and Acrylic Fabrics and blends of these fibers with cotton, in which the level of additive is incorporated at a percent ranging from .1% to 15% by weight of the fabric:

Products

Hosiery  
Shoe innersoles and linings  
Carpets and rugs  
Dresses  
Athletic sportshirts  
Running gear  
Sweatsuits  
Uniforms  
Apparel linings and trimmings

