

(Right Panel)

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

VANTOCIL IB MICROBIOCIDE IS A HIGH-ACTIVITY MICROBIOCIDE FOR USE IN APPLICATIONS SUCH AS OIL-IN-WATER AND WATER-IN-OIL EMULSIONS, INDUSTRIAL REAGENTS, SILICONE SYSTEMS AND CELLULOSE SOLUTIONS. VANTOCIL IB MICROBIOCIDE CAN ALSO BE USED FOR THE PRESERVATION OF ANIMAL HIDES AND SKINS.

Product

Dosage

Silicones:

Use VANTOCIL IB at levels of 100-5,000 ppm for the preservation of silicone systems such as silicone emulsions and silicone dispersions.

1 lb. to 50 lb.
VANTOCIL IB
Per 10,000 lb. product

Tunnel Pasteurization:

For the preservation of waters used in tunnel pasteurization and tunnel cooling of sealed packages of canned and bottled foodstuffs. use VANTOCIL IB at levels of 100-1,000 ppm.

13 fl. oz. to 1 gal.
VANTOCIL IB per 1,000 gal.
tunnel pasteurization water

Aqueous Industrial Chemicals:

For the preservation of aqueous industrial chemicals such as reagents, oil-in-water emulsions, water-in-oil emulsions, textile spin finish lubricants, wash water and cellulose solutions, use VANTOCIL IB at levels of 100-5,000 ppm

1 lb. to 50 lb. VANTOCIL IB
per 10,000 lb. product

Leather Processing:

Use VANTOCIL IB at levels of 100-3,000 ppm for the preservation of leather processing solutions.

1 lb. to 30 lb. VANTOCIL IB
per 10,000 lb. product

Aqueous Based Polymer Latices:

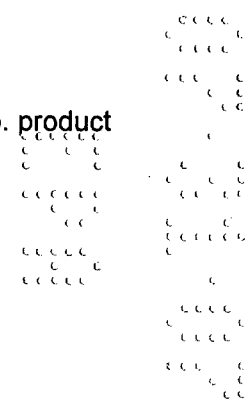
Use VANTOCIL IB at levels of 500-5,000 ppm for the preservation of aqueous based polymer latices such as polyvinyl acetate and polyvinyl alcohol. Do not use to preserve latices used for paper coating compositions that may contact food.

5 lb. to 50 lb. per 10,000 lb
product

Aqueous Mineral Slurries:

Use VANTOCIL IB at levels of 500-5,000 ppm for the preservation of aqueous mineral slurries such as calcium carbonate, titanium dioxide. Do not use to preserve slurries used for paper coating compositions that may contact food.

5 lb. to 50 lb.
per 10,000 lb. product



Aqueous Based Adhesives:

Use VANTOCIL IB for the preservation of aqueous based adhesives such as animal glues, latex adhesives based on polyvinyl acetate, PVA, etc., starch, synthetic, dextrin, casein and other glues at a concentration of 500 – 5000 ppm. May be used in aqueous based latex adhesives intended for food packaging applications a maximum use level of 5,000 ppm.

5 lb. to 50 lb. VANTOCIL IB per 10,000 lb. product

Industrial Electrocoats:

Use VANTOCIL IB at levels of 1,000-5,000 ppm for the preservation of electrocoat resins and deposition systems.

10 lb. to 50 lb. VANTOCIL IB per 10,000 lb product

Household and Consumer Products:

Use VANTOCIL IB at levels of 250 – 2,500 ppm for the preservation of liquid and solid or paste consumer products such as surface cleaners, floor cleaners, disinfectants/sanitizers (non-food contact, hard surface uses), fabric stain removers, fabric softeners, fabric conditioners, laundry detergents, laundry additives, automotive care silicone emulsions and automotive cleaning products.

2.5 lb. to 25 lb VANTOCIL IB per 10,000 lb. product

Preservation of Fresh Animal Hides and Skins:

To preserve the integrity of fresh animal hides and skins prior to or during processing, use 15 fluid ounces to 3 gallons. Add the appropriate quantity of VANTOCIL IB to the brine solution during the curing operation or treat hides or skins with an appropriately diluted aqueous solution during other portions of the processing operation. The specific use rate and contact time needed to control microbial attack will depend upon the degree of decomposition of the hides or skins prior to treatment.

1.0 to 2.6 lbs. of VANTOCIL IB per 1,000 pounds of hides or skins

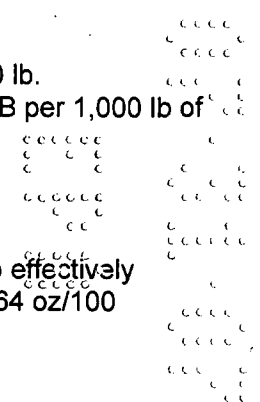
Cat Litter:

Use Vantocil IB at levels of 2,500 – 10,000 ppm (0.25% - 1.0%) for the control of odor causing microorganisms.

2.5 lb. to 100 lb. VANTOCIL IB per 1,000 lb of cat litter

Chemical Toilet Deodorants:

Incorporate Vantocil IB at levels of 9-99% in deodorant concentrates. To effectively control odor in portable or chemical toilets, use 250 – 5000 ppm (3.2 to 64 oz/100 gallons).



Cellulosic Materials and Textiles:

VANTOCIL IB can be used as an agent to control the growth and action of microorganisms, and control generation of odors, on textiles such as cotton, cotton blends, cellulosic materials, and synthetic fibers such as non-wovens, tissues, paper and pulps.

VANTOCIL IB is diluted and applied to give 0.025-2.0% on the dry weight of the substrate. Application is by conventional means such as padding, spraying, soaking or exhaustion. The optimum conditions for application of the dilute solution are pH 6.5-8 and temperature of 20-30 C.

The following are examples of products (substrates) suitable for antimicrobial finishing with VANTOCIL IB:

Textiles such as: household products, for example, upholstery, carpet, curtains, wall coverings, mops, dishcloths, yarns, cords, toweling and blankets.

Cellulosics such as: wipes, tissues, sponges, paper products (non-food contact) such as filters and cellulose pulp.

VANTOCIL IB Application rate to apparel items or clothing is not to exceed 2.0% by dry weight of the substrate to be treated.

Apparel items include –

Apparel items such as: slacks, shirts, underwear, sweatshirts, sweatpants, socks, oven mitts, slippers, bathrobes, gloves, hats, scarves, jackets, sheets, pillowcases, incontinence pad cover stock, washable incontinence briefs and panties.

Oil Recovery:

Not for use in oil recovery systems which employ holding ponds for spent liquids. Do not apply in, over or near marine and/or estuarine oil fields.

Specific rates for use of VANTOCIL IB should be determined by bacteriological tests made prior to treatment. These tests should establish (a) the presence of microorganisms, (b) the severity of the problem, and (c) required treating ratio. The effectiveness of a treatment can be evaluated by similar bacteriological tests. The compatibility of VANTOCIL IB with the water should be determined prior to treatment.

Some suggested treatment methods and treating rates for water systems include:

Oil Field Injection Waters

1. Slug Method – When the system is noticeably fouled, apply 4 gallons of VANTOCIL IB per 1,000 barrels of water (95 ppm of products). VANTOCIL IB should be added to the system at a point where it will be uniformly mixed. Repeat on a weekly basis, or as needed to establish control. When microbial control is evident, the treating rate may be lowered to 2 gallons of VANTOCIL IB per 1,000 barrels of water (47 ppm of product) weekly, or as needed to maintain control. Badly fouled systems should be cleaned before treatment is begun.
2. Continuous Method – Before beginning a continuous treatment, apply a slug of 4 gallons of VANTOCIL IB per 1,000 barrels of water (95 ppm of product).

Continue treatment by applying 0.15 to 0.8 gallons (19 to 102 ounces) of VANTOCIL IB per 1,000 barrels of water (4 to 20 ppm of product).

Drilling Muds

1. Calculate the total volume of the drilling mud system, and using this volume calculate the number of gallons of VANTOCIL IB needed to produce a concentration of approximately 3,000 ppm. For example, 126 gallons of VANTOCIL IB per each 1,000 barrels of total volume will produce this concentration.
2. While the system is circulating, add the amount of VANTOCIL IB calculated above in a thin stream.
3. As the well depth increases, increasing the total volume of the system, add additional VANTOCIL IB as required to maintain the proper concentration.

Workover Fluids

1. Calculate the total volume of the workover fluid system, and using this volume calculate the number of gallons of VANTOCIL IB needed to produce a concentration of approximately 3,000 ppm. For example, 126 gallons of VANTOCIL IB per each 1,000 barrels of total volume will produce this concentration.
2. Add VANTOCIL IB into the system.
3. Circulate the workover fluid system until the fluid returns clear.
4. Shut the system down and idle for several hours.
5. Remove the workover fluid. The well should be ready for productive use.

Slime Control in Paper Mills:

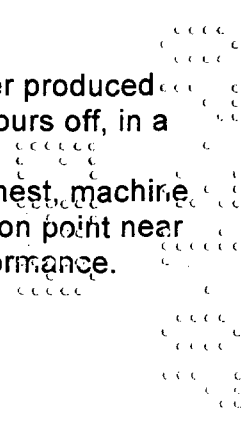
To control the growth of slime-forming organisms in paper mills that produce paper for non-food contact applications. The preferred method of addition is by slug dosing since this ensures that a high concentration of VANTOCIL IB is present in the system for several hours. Arch Chemicals will perform proven laboratory testing to recommend the proper dosage level and time cycles for your individual system. Dosage levels vary from mill to mill, depending on the furnish employed, the cleanliness of the white water system, and the additional nutrients (for example, starch) that may be present in the furnish.

The following quantities of VANTOCIL IB are suggested for trial:

Slug Feed

Between 50 and 1500 ppm of VANTOCIL IB for each ton of paper produced per cycle. Preferred time cycle of slug feed is 1 hour on and 3 hours off, in a 24 hour day.

This preferred addition point is either in the blend chest, broke chest, machine chest or white water system. It is important to avoid direct addition point near an oxidant feed location, as this may interfere with Vantocil performance.



Slime Control in Cooling Towers:

Vantocil IB can also be fed to the fresh water feed for cooling towers and vacuum cooling tower systems. Vantocil IB can be used to control slime-forming organisms in cooling towers used for cooling process water for non-food contact applications.

The following quantities of VANTOCIL IB are suggested for trial:

Fresh Water Feed:

Between 50 and 1500 ppm of VANTOCIL IB for each ton of water added to the cooling tower or vacuum tower system for make-up

General

VANTOCIL IB is an effective preservative in most aqueous compositions. The concentration required to give protection depends on factors such as the susceptibility of the system to microbiological degradation, the extent to which microorganisms can gain access and the type of microorganisms present.

