(MASTER LABEL)
(Center Panel)

VANQUISH™ 100 Antimicrobial

FOR DIRECT INCORPORATION INTO PLASTIC AND RUBBER FOR FURTHER PROCESSING AND FOR THE PRESERVATION OF METAL WORKING FLUIDS USED IN ENCLOSED SYSTEMS

ACTIVE INGREDIENT:

N-BUTYL-1, 2-BENZISOTHIAZOLIN-3-ONE:	94.5%
INERT INGREDIENTS:	5.5%
TOTAL INGREDIENTS:	100.0%

ACCEPTED
FEB 10 2006
Under the Federal Insecticide, Fungicide, and Rodenticide, Act as amended, for the pesticide, registered under EPA Reg. No. 1258-1249

KEEP OUT OF REACH OF CHILDREN

DANGER

FIRST AID

IF IN EYES: HOLD EYE OPEN AND RINSE SLOWLY AND GENTLY WITH WATER FOR 15-20 MINUTES. REMOVE CONTACT LENSES, IF PRESENT, AFTER THE FIRST 5 MINUTES, THEN CONTINUE RINSING. CALL A POISON CONTROL CENTER OR DOCTOR FOR TREATMENT ADVICE.

IF SWALLOWED: CALL A POISON CONTROL CENTER OR DOCTOR IMMEDIATELY FOR TREATMENT ADVICE. HAVE PERSON SIP A GLASS OF WATER IF ABLE TO SWALLOW. DO NOT INDUCE VOMITING UNLESS TOLD TO BY A POISON CONTROL CENTER OR DOCTOR.

IF ON SKIN OR CLOTHING: TAKE OFF CONTAMINATED CLOTHING. RINSE SKIN IMMEDIATELY WITH PLENTY OF WATER FOR 15-20 MINUTES. CALL A POISON CONTROL CENTER OR DOCTOR FOR TREATMENT.

IF INHALED: MOVE PERSON TO FRESH AIR. IF PERSON IS NOT BREATHING, CALL 911 OR AN AMBULANCE, AND THEN GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH, IF POSSIBLE. CALL A POISON CONTROL CENTER OR DOCTOR FOR FURTHER TREATMENT ADVICE

FOR ADDITIONAL INFORMATION IN CASE OF EMERGENCY CALL TOLL FREE 1-800-654-6911. HAVE THE PRODUCT CONTAINER OR LABEL WITH YOU WHEN CALLING A POISON CONTROL CENTER OR DOCTOR OR GOING TO TREATMENT.

NOTE TO PHYSICIAN

PROBABLE MUCOSAL DAMAGE MAY CONTRAINDICATE THE USE OF GASTRIC LAVAGE FOLLOWING INGESTION.

SEE ADDITIONAL PRECAUTIONARY STATEMENTS ON SIDE PANEL

MANUFACTURED BY:

Arch Chemicals, Inc.
501 Merritt 7
Norwalk, CT 06856

CONTENTS:

(APPROX

LBS. NET MINIMUM

U.S. GALLONS)

LOT NUMBER
PRODUCT CODE 06239

EPA REG. NO. 1258-1249
EPA EST. NO. 74637-GBR-001

(Left Panel)

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND
DOMESTIC ANIMALS

DANGER

CORROSIVE. CAUSES IRREVERSIBLE EYE AND SKIN BURNS. HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN OR INHALED. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. DO NOT BREATHE SPRAY MIST. WEAR GOGGLES OR FACE SHIELD AND RUBBER GLOVES WHEN HANDLING. MAY BE FATAL IF INHALED. DO NOT BREATHE VAPORS. USE WITH ADEQUATE VENTILATION. IF NEEDED, USE NIOSH CERTIFIED RESPIRATOR FOR ORGANIC VAPORS, MISTS AND FUMES. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING, DRINKING OR USING TOBACCO. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE.

ENVIRONMENTAL HAZARDS: THIS PRODUCT IS TOXIC TO FISH. DO NOT DISCHARGE EFFLUENT CONTAINING THIS PRODUCT INTO LAKES, STREAMS, PONDS, ESTUARIES, OCEANS OR OTHER WATERS UNLESS IN ACCORDANCE WITH THE REQUIREMENTS OF A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND THE PERMITTING AUTHORITY HAS BEEN NOTIFIED IN WRITING PRIOR TO DISCHARGE. DO NOT DISCHARGE EFFLUENT CONTAINING THIS PRODUCT TO SEWER SYSTEMS WITHOUT PREVIOUSLY NOTIFYING THE LOCAL SEWAGE TREATMENT PLANT AUTHORITY. FOR GUIDANCE CONTACT YOUR STATE WATER BOARD OR REGIONAL OFFICE OF THE EPA. DO NOT CONTAMINATE WATER BY CLEANING OF EQUIPMENT OR DISPOSAL OF WASTES

ACCEPTED

FEB 10 2006

Under the Federal Insecticide, Fungicide, and Rodenticide, Act as amended, for the pesticide, registered under EPA Reg. No. 1258-1249

(Right Panel)

DIRECTIONS FOR USE
It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

METAL WORKING FLUIDS

PRECAUTIONARY STATEMENTS ON THE OPERATION OF METALWORKING EQUIPMENT WITH MWF CONTAINING VANQUISH 100.
For use only in closed metalworking and delivery systems only. Do not permit contact with mixer/loaders or machinists. VANQUISH 100 may be used only in enclosed metalworking systems with local exhaust ventilation. VANQUISH 100 may NOT be used to preserve metalworking fluids intended for use in machining operations which are not enclosed, even when such operations do not generate significant MWF aerosol. In cases where a central sump is used, VANQUISH 100 may NOT be used as a post additive treatment for the metalworking fluid unless all machining operations using this fluid are enclosed, even when the unenclosed equipment is not actively in use.
Do not use this product to treat metalworking fluids that will be resold for use in non-closed metal cutting systems.

VANQUISH 100 is an effective fungicide in most aqueous metalworking fluids. Typical applications, and the suggested range of concentrations on which trials can be based, are:
Fluid Concentrate: VANQUISH 100 fungicide should be added to metalworking fluid concentrates at a level that ensures the final use dilution fluid will contain 26 to 212 ppm of product (25 to 200 ppm active agent).
Use Dilution Fluid: Note that grossly contaminated systems may require mechanical removal of fungal masses, and cleaning of the system before biocide treatment is begun.
Initial Dose: For a noticeably fouled system, add 0.25 to 2.0 lbs. (3.3 to 26.5 fl. oz.) of VANQUISH 100 Fungicide per 1000 gallons of fluid. This will generate a concentration of 25 to 200 ppm active agent.
Subsequent Dose: For maintenance of a clean system, add 0.047 to 0.31 lbs. (0.62 to 4.1 fl. oz.) of VANQUISH 100 fungicide per 1000 gallons of fluid on a periodic basis to maintain microbial control. This quantity will generate a fungicide concentration of 5 to 30 ppm active agent. The frequency of maintenance dosing will be affected by the amount of fluid lost to drag out and other displacements, but also by the severity of the contamination, by the system design, by the effectiveness of system filtration, and by other system variables.

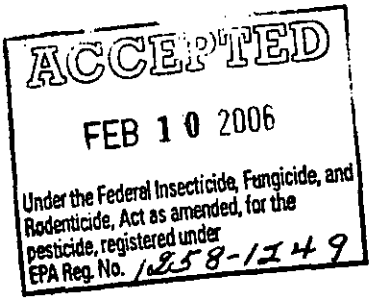
PLASTICS
Many plastics are considered to be resistant to microbial attack, but there are significant exceptions that merit preventative action by the use of antimicrobial additive. Plasticized PVC, polyurethane and silicones are particularly susceptible. The biodeterioration of products based on these types of plastics can be a serious problem for manufacturers. Failure to add the proper amount of antimicrobial additive can lead to premature product failure due to loss of mechanical strength, flexibility or adhesive strength. Also, adverse aesthetic problems such as musty odor, permanent staining or microbial surface growth can lead to customer complaints.
Vanquish 100 Antimicrobial is effective against the microbes which degrade plastics (and plastic additives) or natural rubber and can increase the useful life of articles made from these materials.
Vanquish 100 Antimicrobial additive is effective in most plastic compositions and can be used to preserve natural rubber and such plastics as PVC, polyurethane, silicone, acrylics, and others to produce articles such as;

- coated fabric (e.g. ski wear, raincoats, tents, seat covers)
- floor coverings, underlay & mats
- vinyl wall coverings
- tarpaulins and awnings
- roofing membranes
- synthetic leather (e.g. sneakers and training shoe uppers)
- swimming pool liners, ornamental pond liners
- appliance gaskets (e.g. washers, refrigerator)
- shoe soles, mid-soles & outers
- sealants, sealers, coatings , caulks, weather stripping & non-food contact adhesives
- pet toys & general household items
- (shower curtains, bath mats, sink drain mats, rubber or plastic coated wire shelving and dish drainers)
- auto parts (e.g. landau tops, door seals, shock absorbers)
- foam (e.g. seat cushions, gaskets, insulation)
- tubing (e.g., marine hose and sleeving)
- electrical & pipe wrap
- furniture (e.g. outdoor, leisure, water bed liners, cushions)

Do not use this product to treat food/feed or drinking water contact items or toys.

Vanquish 100 Antimicrobial additive has been found to be an effective polymer preservative at concentrations of 0.03% to 1.0% based on the total weight of the substrate. Typical range of concentrations on which trials can be based, are:

Application	% VANQUISH 100 Antimicrobial (based on total weight of final product)
Plasticized PVC	0.03 to 0.5
Polyurethane	0.05 to 0.5
Silicones	0.05 to 1.0
Polyesters	0.05 to 1.0
Polyolefins	0.05 to 1.0
Acrylics	0.05 to 1.0
Synthetic elastomers such as butadiene-styrene, styrene-isoprene and acrylonitrile-butadiene-styrene	0.03 to 1.0
Natural latex rubber	0.03 to 0.5



The concentration required to give protection depends on several factors. These include the susceptibility of the system to microbiological degradation, the extent to which micro-organisms can gain access, the species involved, pH, temperature, moisture and length of time for which protection is required.

INCORPORATION OF VANQUISH 100 ANTIMICROBIAL INTO POLYMERS

PVC plastisols: For addition to PVC plastisols Vanquish 100 Antimicrobial liquid may be added along with the other additives. Use levels should be calculated based upon the total weight of the formulation.

Cross Linked Polyurethane: For addition to cross linked polyurethane Vanquish 100 Antimicrobial liquid should be added to the polyol at a concentration that will yield the desired use level in the final product after reaction with the isocyanate component. Vanquish 100 Antimicrobial may also be incorporated at an injection port of a reaction injection molding (RIM) machine.

Melt Processed Polymers: For addition to melt processed polymers (PVC, thermoplastic polyurethane, synthetic elastomers and thermoplastic acrylics etc.) Vanquish 100 Antimicrobial liquid may be metered into the melt to yield the desired end use concentration. For example at the injection point in an extrusion system. Alternatively, Vanquish 100 Antimicrobial liquid may be made into a concentrated chip (as above at up to 20% Vanquish 100 Antimicrobial) and these chips blended with non preserved chips in the users plant to yield the desired end use concentration upon subsequent melt processing. For thermoplastic polyurethane, concentrated granules may also be produced by absorbing Vanquish 100 Antimicrobial liquid to granules through shear mixing (up to 20% Vanquish 100 Antimicrobial). These can be blended with non preserved polymer chips in the users plant to the desired use concentration and then further heat processed (i.e. via extrusion).

PVC: Vanquish 100 Antimicrobial liquid may be added to the mixed liquid components added to a blend of PVC resin and solids, shear mixed until a dry blend is achieved and then processed through extrusion, calandering, molding or other system.

Acrylics: In addition to the above, Vanquish 100 Antimicrobial liquid can be added to the liquid monomers before polymerization, at levels to yield the desired use level in the final product after polymerization.

Silicone: For silicone sealants, the Vanquish 100 Antimicrobial liquid may be added to the silicone oil before processing, or to the manufacturing vessel before packing off.

Natural Rubber: Vanquish 100 Antimicrobial can be added to the latex.

The Arch Technical Service Group can provide additional guidance on the proper use of Vanquish 100 Antimicrobial.

STORAGE AND DISPOSAL: DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL. OPEN DUMPING IS PROHIBITED.

PESTICIDE STORAGE: PROTECT FROM FROST. IF FROZEN, ALLOW TO THAW AND STIR WELL BEFORE USE.

PESTICIDE DISPOSAL: PESTICIDE WASTES ARE ACUTELY HAZARDOUS. IMPROPER DISPOSAL OF EXCESS PESTICIDE SPRAY MIXTURE OR RINSATE IS A VIOLATION OF FEDERAL LAW. IF THESE WASTES CANNOT BE DISPOSED OF BY USE ACCORDING TO LABEL INSTRUCTIONS, CONTACT YOUR STATE PESTICIDE OR ENVIRONMENTAL CONTROL AGENCY, OR THE HAZARDOUS WASTE REPRESENTATIVE AT THE NEAREST EPA REGIONAL OFFICE.

CONTAINER DISPOSAL: TRIPLE RINSE (OR EQUIVALENT). THEN OFFER FOR RECYCLING OR RECONDITIONING, OR PUNCTURE AND DISPOSE OF IN A SANITARY LANDFILL, OR BY OTHER PROCEDURES APPROVED BY STATE AND LOCAL AUTHORITIES.

CORROSIVE LIQUID, N.O.S.
(CONTAINS N-BUTYL-1, 2-BENZISOTHIAZOLIN-3-ONE)
UN 1760