

 <p>U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Antimicrobials Division (7510C) 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460</p> <p><b>NOTICE OF PESTICIDE:</b> <u> X </u> Registration <u>   </u> Re-registration</p> <p>(under FIFRA, as amended)</p>	EPA Reg. Number: <b>1258-1285</b>	Date of Issuance: <b>AUG 20 2004</b>
	Term of Issuance: <b>CONDITIONAL</b>	
	Name of Pesticide Product: <b>VANQUISH SL 10 ANTIMICROBIAL</b>	
Name and Address of Registrant (include ZIP code):  <b>Arch Chemicals, Inc.</b>  <b>1955 Lake Park Drive Smyrna, Georgia 30080</b>		
<p><b>Note:</b> Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Antimicrobials Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.</p>		
<p>On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended.</p> <p>Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.</p> <p>This product is conditionally registered in accordance with FIFRA Section 3(c)(7)(A) provided you:</p> <ol style="list-style-type: none"> <li>1. Submit and/or cite all data required for registration of your product under FIFRA Section 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for re-registration of your product under FIFRA Section 4.</li> <li>2. Submit, within 120 days, three copies of a final printed label and technical bulletin (along with a copy of this notice), which makes the following changes: <ol style="list-style-type: none"> <li>A. Revise the EPA Registration Number to read, "EPA Reg. No. 1258-1285".</li> </ol> </li> </ol>		
Signature of Approving Official: <b>Marshall Swindell, Product Manager, Team 33, Regulatory Management Branch I, Antimicrobials Division</b>	Date: <b>AUG 20 2004</b>	

2810

(Center Panel)

**Vanquish SL 10 Antimicrobial**

**An Anti-microbial / Anti-fungal Additive for Plastics**

Active Ingredients:	N-butyl-1,2-benzisothiazolin-3-one.....	4.75%
	Zinc 2-pyridienthiol-1-oxide.....	4.75%
Inert Ingredients:	.....	90.5%
Total Ingredients:	.....	100.0%

**KEEP OUT OF REACH OF CHILDREN**

**WARNING**

**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. Do not give anything to an unconscious person.

**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, 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 1-800-286-7850. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**NOTE TO PHYSICIAN:** Possible mucosal damage may contraindicate the use of gastric lavage following ingestion

SEE ADDITIONAL PRECAUTIONARY STATEMENTS ON SIDE PANEL

Contents: US Gallons

EPA Reg. No. ~~72674~~  
1258-1285

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:  
AUG 20 2004

EPA Est. No. 74637-GBR-001

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
registered under EPA Reg. No.  
1258-1285

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Manufactured for:

~~AVECIA Inc. 1405 Foulk Road  
Wilmington, DE 19803 USA~~

Arch Chemicals  
1955 LAKE PARK DRIVE  
SMYRNA, GA 30080

Lot Number:

Product Code:

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

AUG 20 2004

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

1258-1285-

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(Left Panel)

PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING**

Causes skin irritation and moderate eye irritation. Harmful if swallowed or absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and chemical resistant gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing 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 Pollution Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to the 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  
with COMMENTS  
in EPA Letter Dated:

AUG 20 2004

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

125-8-1285

(Right Panel)

**DIRECTIONS FOR USE:** It is a violation of Federal law to use this product in a manner inconsistent with its labeling. **Do not use for any applications involving direct or indirect food and/or drinking water.** See Technical Information Bulletin for Directions for Use.

**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, 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.

For information on spills, call 1-800-424-2466

ACCEPTED  
with COMMENTS  
on 8/20/04 Date

AUG 20 2004

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

1258-1285

# AVECIA Biocides Arch Chemicals



ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

AUG 20 2004

## VANQUISH® SL 10 Antimicrobial Technical Information Bulletin

### An Anti-microbial / Anti-fungal Additive for Plastics

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

1258-1283

#### SUMMARY

VANQUISH SL 10 anti-microbial, effective for control of fungi and bacteria, is based on the active ingredients N-butyl-1,2-benzisothiazolin-3-one and zinc 2-pyridinethiol-1-oxide. VANQUISH anti-microbial is used for the protection of plastic products made from polymers such as polyvinylchloride, polyurethane, and others.

VANQUISH SL 10 antimicrobial is registered with the Environmental Protection Agency and has EPA registration No. 72674-

#### TYPICAL PROPERTIES OF VANQUISH SL 10 FORMULATION

<b>Composition</b>	Active ingredients: N-butyl-1,2-benzisothiazolin-3-one and zinc 2-pyridinethiol-1-oxide.
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**Active agents content, %** 4.75% w/w each

**Physical Form** Liquid

<b>Water Content, %</b>	<0.5%
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#### GENERAL

VANQUISH SL 10 anti-microbial provides effective control of a wide range of bacterial

and fungal organisms thereby preventing degradation of the product. It can protect the surface of substrates and can prevent objectionable odors and aesthetic problems such as staining, or growth on or in the substrate. VANQUISH SL 10 anti-microbial is easy to use due to its liquid form and excellent compatibility in most systems

#### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labelling. **Do not use for any applications involving direct or indirect food and/or drinking water contact.**

Many plastics are considered to be resistant to microbial attack, but there are significant exceptions that merit preventative action by the use of anti-microbial additives. Plasticized PVC, polyurethanes and silicones are particularly susceptible. The biodeterioration of products based on these (and other) types of plastics can be a serious problem for manufacturers. Failure to add the proper amount of anti-microbial 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 SL 10 anti-microbial is effective against the microbes which degrade

plastic (and plastic additives) can increase the useful life of plastic articles.

VANQUISH SL 10 anti-microbial additive is effective in most plastics compositions and can be used to preserve plastics such as PVC, polyurethanes, polyolefins and others to produce articles such as; shower curtains, coated fabric (e.g. ski wear, raincoats, tents, etc.), floor coverings, underlay & mats, vinyl wall coverings, tarpaulins and awnings, roofing membranes, synthetic leather (e.g. sneakers and training shoe uppers), swimming pool and ornamental pond liners, conveyor belts, appliance gaskets (e.g. washers, refrigerator, etc.), shoe soles and mid-soles, sealants, caulks, weather stripping, non-food contact adhesives, auto parts (e.g. landau tops, door seals, shock absorbers, etc.), foam (e.g. seat cushions, gaskets, insulation) electrical & pipe wrap, furniture (e.g. outdoor, leisure, water bed liners, cushions).

VANQUISH SL 10 antimicrobial additive has been found to be an effective polymer preservative at concentrations of 0.5% to 8.0% based on the total weight of the substrate. Typical range of concentrations on which trials can be based, are:

AUG 20 2004  
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 1258-1275-  
Application

%VANQUISH SL 10  
Antimicrobial  
(based on total weight  
of final product )

Polyvinylchlorides	0.5 to 8.0
Polyurethanes	0.5 to 8.0
Silicones	1.0 to 8.0
Polyolefins	1.0 to 8.0

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, and length of time for which protection is required.

### INCORPORATION OF VANQUISH SL 10 ANTIMICROBIAL INTO POLYMERS

**Polyurethane:** For addition to cross linked polyurethane VANQUISH SL 10 should be added to the polyol mixture at a concentration that will yield the desired use level in the final product after curing with isocyanate. For thermoplastic polyurethane see 'Melt-Processed Polymers' below.

**Melt Processed Polymers:** For addition to melt processed polymers (PVC, thermo-plastic polyurethane, etc.), Vanquish SL10 may be metered into the melt at the injection point in an extrusion system to yield concentrated chips (masterbatch) or the desired end use concentration. Masterbatch chips can be blended with non-preserved chips in the users plant to yield the desired end use concentration upon subsequent melt processing.

**For PVC** VANQUISH SL 10 may also be added to the mixed liquid components which are added to a blend of resin and other solid components, shear mixed until a dry blend is achieved and then processed through extrusion, calendering, molding or other system.

**PVC Plastisols:** Incorporation is very flexible and VANQUISH SL 10 anti-microbial liquid may be added to other liquid components during manufacture or blended into a ready-made plastisol. Use levels should be calculated based upon the total weight of the formulation.

**For silicone sealants,** the VANQUISH SL 10 may be added to the silicone oil before processing, or to the manufacturing vessel before packing off.

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For polyolefin, VANQUISH SL 10 may be mixed with powdered polymer to yield the desired end use concentration then extruded, followed by fabrication to molding or film, etc. Alternatively, VANQUISH SL 10 may be made into a masterbatch by extrusion, diluted to end-use concentration with more polymer in the extruder, then fabricated as required.

*Arch Chemicals Group*  
The ~~Avocia Technical Service Group~~ can provide guidance on the proper use of Vanquish anti-microbial.

**FIRST AID**

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**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 do so by a poison control center or doctor. Do not give anything to an unconscious person.

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For additional information in case of emergency call toll free 1-800-286-7850. Have the product container or labeling with

you when calling a poison control doctor or going for treatment.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:  
AUG 20 2004

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 125-8-1285

**WARNING**

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**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 Pollution 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.

**STORAGE AND DISPOSAL**

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

**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



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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.

For information on spills, call 1-800-424-2466.

**SAFE HANDLING INFORMATION**

Refer to the Material Safety Data Sheet (MSDS) available from Avecia Biocides for information on the safe use, handling and disposal of this product.

For literature, samples and order information, ~~please~~ contact Customer Services: (800) 435-8679, ext. 8304.

For technical information, please contact Application Research and Technical Services at (800) 456-3669, ext. 8428.

**FOR YOUR PROTECTION** *Arch Chemicals*

Avecia Inc. ("AVECIA") warrants that this product conforms to the chemical description on the label and that it is reasonably fit for the purposes stated on the label when used in accordance with AVECIA's directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to AVECIA, and the buyer or user assumes the risk of any such use. AVECIA DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY.

Statements herein, therefore, should not be construed as representations or warranties.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

AUG 21 2007

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

1-258-1285

IN NO EVENT SHALL AVECIA BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS, ON ANY THEORY WHATSOEVER, INCLUDING NEGLIGENCE, and AVECIA's sole liability and Buyer's and User's exclusive remedy shall be limited to the refund of the purchase price. Statements concerning the use of the products or the formulations described therein are not to be construed as recommending the infringement of any

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patent and no liability for infringement  
arising out of any such use is assumed.

~~Aveco, Inc.~~  
~~1405 Foulk Road~~  
~~Wilmington, DE 19803~~

*Arch Chemicals*

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:  
AUG 20 2004

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
registered under EPA Reg. No.  
*1258-1285*