



## VINYZENE™ IT-4000 DIDP

Antimicrobial Additive for Plastics

### General

VINYZENE™ IT-4000 DIDP antimicrobial is a solution of 4,5-dichloro-2-n-octyl-4-isothiazolin-3-one in a nonvolatile plasticizer carrier. VINYZENE antimicrobials are effective for use in Vinyl, polyurethane and other polymeric compositions. Low levels of VINYZENE antimicrobials will provide long term preservation against a broad spectrum of bacterial and fungal organisms and will help prevent surface growth, permanent staining, embrittlement and premature product failure.

### Physical Properties

The following are typical properties of VINYZENE™ IT-4000 DIDP; **they are not to be considered product specifications:**

Appearance: .....	Straw-colored, clear liquid
Active ingredient: .....	4%
Inert carrier: .....	96%
Carrier: .....	Diisodecylphthalate
Density: .....	8.1 lbs./gal.
Specific gravity: .....	0.98
Odor: .....	Mild

### Applications/ Directions for Use

VINYZENE™ IT-4000 DIDP antimicrobial is recommended for Vinyl film and sheeting, extruded profiles, plastisols, molded goods, organosols, fabric coatings and similar polymeric systems. VINYZENE IT-4000 DIDP antimicrobial is compatible with most polymer formulations and will not discolor or detract from the protected product's chemical or physical properties. VINYZENE antimicrobial solutions can be conveniently incorporated into the formulation during the mixing or compounding processes.

### Recommended Use Levels

In general, VINYZENE™ IT-4000 DIDP antimicrobial is recommended at concentrations between 2.0% and 5.0%. For outdoor applications, a level of 3.0% to 5.0% is recommended in Vinyl formulations for maximum effectiveness. Dow maintains extensive microbiological, chemical and physical testing facilities in order to assist the manufacturer in determining the optimum level of biocide agent required for each compound.

VINYZENE IT-4000 DIDP antimicrobial is incorporated into a compound by substituting the required level (2.0% to 5.0%) for an equal amount of plasticizer or polyol. For example, in a 1000 lb. batch containing 300 lbs. of plasticizer and requiring a level of 3.0% VINYZENE IT-4000 DIDP antimicrobial, 30 lbs. of the plasticizer or polyol would be replaced with 30 lbs. of VINYZENE IT-4000 DIDP antimicrobial. It is important to remember that the cost of using VINYZENE antimicrobial is, therefore, calculated as the difference in cost between the VINYZENE antimicrobial and the replaced plasticizer.

VINYZENE antimicrobial should be added early in the blending operation to assure homogeneity.

### Handling Precautions

In undiluted form, VINYZENE™ IT-4000 DIDP antimicrobial is corrosive to the skin or eyes. If VINYZENE IT-4000 DIDP antimicrobial is splashed in the eyes, flush with copious amounts of water and secure immediate medical attention. If it is splashed on the skin, wash

thoroughly with soap and water. VINYZENE™ IT-4000 DIDP antimicrobial solutions are harmful if swallowed and should be kept out of reach of children.

Wear eye protection and rubber gloves when handling.

VINYZENE antimicrobials are toxic to fish and wildlife and should not be discharged where it will drain into lakes, streams, ponds, or public water.

VINYZENE antimicrobials should only be used as specified on the label.

## **Storage and Disposal**

Do not contaminate water, food or feed by storage or disposal.

Triple rinse empty containers and offer for recycling or reconditioning. Plastic drums which cannot be reconditioned and recycled should be punctured or crushed, and disposed of in landfill or other procedures approved by state and local authorities.

Pesticide wastes are toxic. 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 for guidance.

## **Packaging**

Plastic Drum, 440 lbs. net weight

## **Safety Data Sheets**

Safety Data Sheets (SDS) are available outlining hazards and safe handling methods. Contact Dow for copies of the SDS for this product and for other handling information.

## **Product Stewardship**

When considering the use of any Dow product in a particular application, review the latest Safety Data Sheet (SDS) and country-specific product label to ensure the intended use is within the scope of approved uses. Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products – from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

## **Customer Notice**

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including Safety Data Sheets (SDS), should be consulted prior to use of Dow products. Current Safety Data Sheets are available from Dow.

For further information visit our website:  
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