

VINYZENE™ IT-4081 DIDP Antimicrobial Additives for Plastics

Description

VINYZENE IT-4081 DIDP is an antimicrobial solution consisting of 4,5-dichloro-2-n-octyl-4-isothiazolin-3-one and 10, 10' oxybisphenoxarsine (OBPA) in a nonvolatile plasticizer carrier. VINYZENE IT-4081 DIDP is an effective antimicrobial for use in PVC, polyurethane and other polymeric compositions requiring bacterial and fungal protection. Low levels of VINYZENE IT-4081 DIDP will provide long-term preservation against a broad spectrum of bacterial and fungal attack and will help prevent surface growth, permanent staining, embrittlement and premature product failure.

Application

VINYZENE IT-4081 DIDP is recommended for vinyl film and sheeting, extruded profiles, plastisols, molded goods, organosols, fabric coatings, urethane shoe soles and foams, and similar polymeric systems. The antimicrobial is compatible with most polymer formulations and will not discolor or detract from the protected product's chemical or physical properties. VINYZENE IT-4081 DIDP solution can be conveniently incorporated into the formulation during the mixing or compounding processes.

Typical Properties

These properties are typical but do not constitute specifications.

Active ingredients	9%
Inert Carrier	91%
Appearance	Straw-colored, clear liquid
Carrier	Diisodecyl phthalate
Density	8.2 lbs/gal
Specific Gravity	0.98
Odor	Mild

Recommended Use Levels

In general, VINYZENE IT-4081 DIDP is recommended at concentrations between 1.0% and 1.5%. For outdoor applications, a level of 1.5% is recommended in PVC formulations for maximum effectiveness. Rohm and Haas Company 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-4081 DIDP is incorporated into a compound by substituting the required level (1.0% or 1.5%) for an equal amount of plasticizer or polyol. For example, in a 1000 lb. batch containing 300 lbs. of plasticizer and requiring a 1.0% Vinyzene antimicrobial level, 10 lbs. of the plasticizer or polyol would be replaced with 10 lbs. of appropriate Vinyzene antimicrobial. It is important to remember that the cost of using Vinyzene antimicrobials is, therefore, calculated as the difference in cost between the Vinyzene antimicrobial and the replaced plasticizer.

VINYZENE IT-4081 DIDP should be added early in the blending operation to assure homogeneity.

Handling Precautions

In its undiluted form, VINYZENE IT-4081 DIDP is a skin irritant and contact with the skin or eyes should be avoided. If VINYZENE IT-4081 DIDP 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 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 IT-4081 DIDP 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.

Standard Package

Plastic Drum, 240 lbs. net weight

Rohm and Haas Company is a raw materials supplier, not an end-use manufacturer of product. Development of a final formulation, testing, application, and ultimate performance of the end-use product is fully the responsibility of the formulator.

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