

VINYZENE™ SB-27 K120ND Biocide

GENERAL DESCRIPTION

VINYZENE™ SB-27 K120ND biocide is a concentrate of 4, 5-dichloro-2-n-octyl-4-isothiazolin-3-one in an acrylic resin carrier.

The product supplied as homogeneous solid in pelletized form, is recommended for polyolefin, PVC and other polymeric compositions requiring preservation against fungal and bacterial deterioration.

Low levels of VINYZENE™ SB-27 K120ND will provide long-term preservation against fungal and bacterial attack and will help prevent surface growth, permanent staining, embrittlement and premature product failure.

TYPICAL PROPERTIES

Composition

Active Ingredient	DCOIT at 10% (4, 5-dichloro-2-n-octyl-4-isothiazolin-3-one)
Resin Carrier	Acrylic polymer, PMMA
Specific Gravity	1.21
Appearance	Light straw pellet
Pellet Size	Less than 4.75 mm (corresponding to ~ 0.187 inches)
Bulk Density (ASTM D-1895)	654 Kg/m ³

(These values do not constitute specifications)

APPLICATIONS

Interior and Exterior

Applications based on PVC, Olefins, TPE and other polymers, and especially used for wood plastics composites and others.

The most commonly used methods for preserving plastics against fungal and bacterial attack are to add liquid solutions of additives (such as the VINYZENE™ IT series) or to add pure active ingredient in powdered form. Such highly concentrated powders are often toxic and must be handled with extreme caution; they can present hazards due to dusting problems and also can cause contamination of processing equipment.

Liquid systems have eliminated the dusting problem, but require careful handling to minimize contact with

the skin and eyes. The pelletized form of VINYZENE™ SB-27 K120ND not only eliminates dusting problems but reduces the need for special handling (please refer to handling section).

VINYZENE™ SB-27 K120ND is compatible with most thermoplastic resins and will not discolor or detract from the product's chemical or physical properties.

VINYZENE™ SB-27 K120ND can be incorporated into the resin compound at any convenient stage of the manufacturing process. The product can be fed into an extrusion operation in much the same way as pelletized color concentrates.

Properly formulated compounds containing VINYZENE™ SB-27 K120D will resist fungal and bacterial deterioration after long term exposure to heat and severe weathering conditions.

For those processors and compounder unable to use VINYZENE™ SB-27 K120ND in pellet form, other isothiazolin-based VINYZENE™ biocidal compounds are available as 4%, 10%, 20% and 25% active solutions in various plasticizers. Please contact your Rohm and Haas Representative for additional information.

RECOMMENDED USE LEVELS

Effective preservation against the growth of fungi and bacteria can be obtained with low levels of VINYZENE™ SB-27 K120ND. Additions level depend upon the fungal and bacterial susceptibility of the product, the amount of preservation required, the ultimate use of the product and the degree of exposure to outdoor weathering or other conditions favorable for fungal and bacterial growth.

Interior Applications	0.8% to 1.2% based upon the total weight of formulation (8 to 12 kg/1000 kg of compound).
------------------------------	---

Exterior Applications	1.2% to 2.0% based upon the total weight of formulation (12 to 20 kg/1000 kg of compound).
------------------------------	--

Wood plastics composites	1.2% to 2%
---------------------------------	------------

The following recommended use levels are based upon tests conducted in Rohm and Haas laboratories and experience with exposure of products to actual service conditions

Fungal and bacterial activity under severe outdoor exposure is influenced by the overall weatherability of the plastic system. Recommendations on formulation parameters for products subjected to long term outdoor exposure are available from Rohm and Haas.

To meet your specific requirements, fungal and bacterial susceptibility testing and assistance in developing formulations are available from Rohm and Haas.

TOXICOLOGY

Extensive toxicological studies have been conducted by recognized independent testing laboratories. Based on these tests, VINYZENE™ SB-27 K120ND biocide has been placed in Toxicity Category III (40 CFR Section 156.10 (h)). The appropriate precautionary statements specified for this category are printed on the product label.

HANDLING

Please refer to the safety data sheet of this product for precise handling instructions. The processing and use of industrial chemicals require adequate technical and professional knowledge.

Rubber gloves and goggles are recommended to ensure safe handling. Avoid contact with skin. Wash after handling. Do not contaminate water or food by cleaning of equipment or disposal of waste.

Disposal of packaging - Follow label warnings even after container is emptied since empty containers may retain product residues. Do not reuse empty container without professional cleaning for food, clothing, or products for human or animal consumption or where skin contact can occur.

STORAGE

Do not store this material near food or drinking water. Keep container tightly closed when not in use. Remove empty polyethylene liners from the drum and incinerate the liner or dispose with other refuse.

Empty drums may be reconditioned and recycled. Alternatively, crush fiber drums and incinerate or dispose with other refuse.

At high concentrations biocides are dangerous if released in the environment. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. Consequently any release should be avoided. In case of accidental spill take all necessary actions to recover the product and dispose of according to local regulations. If these wastes cannot be disposed of by use according to label instructions, contact your local Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest Regional Office for guidance.

Please read and apply recommendations written in the corresponding Material Safety Data Sheet applicable in your country.

Material Safety Data Sheets are available outlining hazards and safe handling methods. Please contact your Rohm and Haas Representative for copies of the MSDS for this product and for other handling information.

USA SPECIFIC

EPA requires that any pesticide product should only be used as specified on the container label.

EPA REGISTRATION N°: # 2829-140.

BIOCIDAL PRODUCTS DIRECTIVE COMPLIANCE

VINYZENE™ SB-27 K120ND is a biocidal product intended for use in accordance with product type 9 (Fiber, leather, rubber and polymerized materials preservatives) of the Biocidal Product Directive 98/8/EC (BPD).

CAUTION

Use biocides safely. Always read the label and product information before use.

More information about our products and services and all our worldwide addresses:

<http://www.rohmhaas.com>

ROHM and **HAAS** 

VINYZENE is a trademark (™) of Rohm and Haas Company, or of its subsidiaries or affiliates. The Company's policy is to register its trademarks, where products designated thereby are marketed by the Company, its subsidiaries or affiliates.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of our products are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale.

Suggestions for use of our products, or the inclusion of descriptive material from patents and the citation of specific patents in this publication, should not be understood as recommending the use of our products in violation of any patents or as permission or license to use any patent of the Rohm and Haas Company.