



NUMBER 4866

Fungitrol™ 404-DS fungicide

Fungicide for Mildew Control

EPA Registration No. 72304-1-1529

EPA Establishment No. 70815-GA-1

EINECS No. 217-588-1

Description

Fungitrol 404-DS fungicide is a broad-spectrum microbicide for the control of mildew and fungi. This is a dispersion form of Fungitrol 960S fungicide, providing excellent performance characteristics when used as a fungicide/mildewicide in aqueous paints, coatings, adhesives, caulks, sealants, grouts, joint compounds and wood preservative stains.

Key Attributes

- Liquid dispersion allows for ease of handling
- Chemically stable below pH 9
- Stable to UV radiation

Applications and Usage Notes

Aqueous Adhesives

Fungitrol 404-DS fungicide may be incorporated into adhesives to protect the applied adhesive films from mold growth and decomposition. Fully disperse 12.4 to 24.8 pounds of Fungitrol 404-DS fungicide per 1,000 pounds of adhesive while it is being manufactured. Use the high rate in areas favorable to mildew and mold growth, such as where surfaces frequently are warm and moist. DO NOT use in adhesives designed for applications on food-contact surfaces, or on the interior of buildings engaged in food processing or food handling.

Aqueous Caulks and Sealants

To provide mildew and mold control on caulking or sealing deposits after application, fully disperse 1.25 to 12.5 pounds of Fungitrol 404-DS fungicide per 1,000 pounds of caulk or sealant products while they are being manufactured. The high rate is recommended for exterior caulks. DO NOT use in caulks or sealants designed for applications on food-contact surfaces, or on the interior of buildings engaged in food processing or food handling.

Freshly Sawn Wood

To prevent sapstain and surface mold growth on freshly sawn wood, mix Fungitrol 404-DS fungicide into water-based dip treatment suspensions at the rate of 5 to 10 pounds per 100 gallons of water. Use the high rate if the wood to be treated is expected to remain in undried condition for a prolonged period. Dip recently sawn wood products into the treatment suspension for one minute, which should be sufficient time to permit thorough coating of the wood surfaces. Maintain thorough agitation of the treatment suspension while wood is being treated, because of variation in susceptibility of fresh sawn wood related to the type of wood, sawing and storage methods, temperature and humidity conditions, treatment method, etc. it is recommended that field tests are performed in order to optimize the means of application and the concentration of the treatment formulation. For best results, wood should be treated as soon as possible after it is sawed. Additional treatment suspension can be added to the treatment vessel provided the appropriate dilution is first prepared in a suitable container prior to adding to the treatment vessel. The treatment vessel may be cleaned by draining and rinsing with clean water on an aqueous detergent solution. Do not dispose of spent treatment suspensions or treatment vessel washings in any manner that may contaminate soil or water.



Compostie Wood Products

To provide decay protection for composite wood products, such as flakeboard or particle board that is to be used for building siding, sheathing, construction timbers, decking or planking, incorporate Fungitrol™ 404-DS fungicide into the wood composite material while it is being manufactured. Use 1.25 to 12.5 pounds of Fungitrol 404-DS fungicide per cubic foot volume of final wood composite. The high loading rate should be used in composite wood products that are intended to be installed in contact with soil or concrete, or where the wood is intended to be exposed to conditions with continuously high levels of moisture. Thoroughly incorporate Fungitrol 404-DS fungicide into the composite material as it is being ground, mixed or blended with adhesives or binding materials prior to final formation of the wood composite matrix.

If an in-can preservative is used in combination with Fungitrol 404-DS fungicide, the compatibility of the in-can preservative with Fungitrol 404-DS fungicide should be evaluated. The use of Nuosept™ 95 Preservative is recommended as the in-can preservative in combination with Fungitrol 404-DS fungicide (Refer to International Specialty Products Nuosept 95 Preservative Product Data Bulletin). Further information regarding compatible in-can preservatives can be obtained from ISP's technical staff.

Latex Emulsion Paints

Fungitrol 404-DS fungicide is a 40% active aqueous dispersion of Fungitrol 960S. It can be added during the pigment grind operation of paint manufacture, during or after letdown, or post-added to the finished product. To ensure a uniform mixture of Fungitrol 404-DS fungicide, gentle mixing is recommended before use. Generally, 12.4 to 24.8 pounds of Fungitrol 404-DS fungicide per 100 gallons of exterior paint are sufficient for effective prevention of mildew growth on the surface of paint film. Levels of 6.2 to 12.4 pounds of Fungitrol 404-DS fungicide per 100 pounds are effective in interior latex paints.

Fungitrol 404-DS fungicide is compatible with latex paints containing zinc oxide. It can be used in acrylic, vinyl- acrylic or polyvinylacetate latexes.

Typical Product Properties

Active Ingredient: Tetrachloroisophthalonitrile	40.4%
Physical Form	Aqueous Dispersion
Empirical Formula	C ₈ Cl ₄ N ₂
Molecular Weight	265.9
Freezing Point	-5°C
Specific Gravity (Water=1)	1.24
Density	10.3 Lbs./Gallon
Corrosivity to Metals	Noncorrosive
Stability	Thermally stable under normal storage temperatures. Chemically stable in alkaline (less than pH 9) or acidic conditions. Stable to ultraviolet radiation.

Packaging Information

Product	Physical Form	Pkg Type	Net Wgt (lbs)	Net Wgt (kgs)
Fungitrol 404-DS	Liquid	Drum	308 lbs	140 kgs
Fungitrol 404-DS	Liquid	Drum	440 lbs	199.6 kgs
Fungitrol 404-DS	Liquid	IBC	3,200 lbs	1,451.5 kgs

Product Safety Information

Please see the Safety Data Sheet (SDS) regarding safety information.

Regulatory requirements governing the use, registration, and approval of industrial biocides around the world are continually changing and evolving.

All statements, information and data presented herein are believed to be accurate and reliable, but are not to be taken as a guarantee, an express warranty, or an implied warranty of merchantability or fitness for a particular purpose, or representation, express or implied, for which Ashland Inc. and its subsidiaries or affiliates assume legal responsibility. It is the customer's responsibility to ensure that its use of industrial biocidal products is in accordance with all applicable laws and regulations. In addition, customers are strongly advised to confirm that the industrial biocide they are purchasing has all necessary regulatory approvals for the intended use and the country where the product is going to be used.

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