FUNGITROL® 404DS Fungicide

For Manufacturing Use to Impart Control or Mildew on Paint and Stain Films, Adhesives, Caulks and Sealants. Sapstain on Freshly Sawn Wood and Decay Protection in Wood Composites
For Surface Mold and Mildew Prevention and Suppression of Algae on Cellulose Materials, Wallboard, Concrete, Masonry and other Building Materials
For Control of Fungal Growth in Aqueous and Soled Based Paper and Paperboard Applications

ENVIRONMENTAL HAZARDS
This product is toxic to fish and wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other water unless in accordance with the requirements of a National Discharge Elimination System (NDES) permit and the permitting authority has not been notified in writing prior to discharge. Do NOT discharge effluent containing this product to sewersystems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

DIRECTIONS FOR USE
It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
This product is used to protect treated articles from decay, mold or mildew, including paints and stains, adhesives, caulks, grouts, sealants, wood and wood composites, and non-food use paper and paperboard.
This product must not be sold as a midwestpaint additive designed for direct sale to retail customers, e.g. in a "pillow pack" or other small volume or one-use package.
This product may be added only to paint products that are labeled:
A) with product-specific instructions for the use of a respirator during application, or
B) as follows: "When applying with a sprayer, wear a NIOSH approved respirator with a P100 or P95 air filter. If it is not present in the paint product or recommended for use as an additive in the paint product, "Hold N" as an additional respirator type.
This product must not be used as an in-container preservative.
Mix contents slowly before using to assure uniform mixture. FUNGITROL 404DS is an aqueous dispersion containing 40.4% (w/w) active ingredient. FUNGITROL 404DS is to be used in water or water coming into contact with the treated article.
Do not apply this product by means of ultra-low volume mist-blowers or thermal "fogging" devices.
See accompanying product information sheet for additional directions for use.

STORAGE AND DISPOSAL
Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.
PESTICIDE STORAGE: Store in a cool place, protected from excessive heat.
PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide formulation or rinseate 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.
CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Triple rinse and further contain. Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over and tip it on its side. Repeat these two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY AND LIMITATION OF DAMAGES
CONDITIONS OF SALE: TOY CHEMICAL CORPORATION LIMITS THE WARRANTY TO THE COST OF THE PRODUCT CONFORMING TO THE chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with the directions under normal conditions of use. This warranty does not extend to the user in the event the product contrary to label conditions, or instructions, or under abnormal use conditions, or if the product is used under conditions not reasonably foreseeable to Troy Chemical. TROY CHEMICAL DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, TROY CHEMICAL SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, AND TROY CHEMICALS SOLE LIABILITY AND BUYERS' AND USERS' EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE. BUYER AND USER ACKNOWLEDGE AND AGREE TO MAKE ALL RISKS AND LIABILITY RESULTING FROM HANDLING, STORAGE AND USE OF THIS PRODUCT. TROY CHEMICAL DOES NOT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTY, GUARANTEE, OR REPRESENTATION CONCERNING THIS PRODUCT.

FUNGITROL® 404DS Fungicide

ACTIVE INGREDIENT:
Chlorothalonil (tetrachloroisopropylthirane) 40.4%
OTHER INGREDIENTS: 59.6%
TOTAL: 100.0%
Contains 4.17 pounds chlorothalonil active ingredient per gallon.

USER SAFETY RECOMMENDATIONS
Users should: Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

FIRST AID
IF INHALED:
• More 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.

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 eye.
• Call a poison control center or doctor for treatment advice.

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 immediately for treatment advice.

IF SWALLOWED:
• If swallowed, immediately call a Poison Control Center or doctor for treatment advice.

KEEP OUT OF REACH OF CHILDREN

WARNING - AVISO
INDUSTRIAL USE ONLY
See Side Panel for Additional Precautionary Statements
IN CASE OF EMERGENCY:
CALL 1-800-424-9300

Net Weight:
Manufactured for:
Troy Chemical Corporation
One Avenue L, Newark, N.J. 07105
NOTES TO PHYSICIAN:
Probable mucous damage may contribute to the use of gastric lavage. Persons having a temporary allergic reaction respond to treatment with antihistamines or steroid creams and/or systemic steroids.
PRODUCT INFORMATION SHEET
This document must accompany each shipment
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DIRECTIONS FOR USE

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LATEX EMULSION PAINTS, STAINS, AND COATINGS
Disperse 12.4 to 24.8 pounds (6.6 to 19.3 pints) of FUNGITROL 404DS per 100 gallons of exterior paint to obtain effective mildew control in the paint film after it is applied. Use the high rate in areas favorable to mildew and mold growth, such as where painted surface frequently are warm and moist. FUNGITROL 404DS, when added to stains designed for exterior wood, also protects the wood from surface molds and mildew stains caused by fungi.

Use 6.2 to 12.4 pounds (4.8 to 9.6 pints) of FUNGITROL 404DS per 100 gallons of interior latex paint.

FUNGITROL 404DS is compatible with zinc oxide in latex paints.
FUNGITROL 404DS can be used with either unmodified or alkyd modified acrylic, vinyl acrylic, or polyvinyl acetate latexes.

FUNGITROL 404DS can be added into the paint formula during the pigment grind operation, during or after letdown, or post-added to a finished paint product after manufacture.
Note: If FUNGITROL 404DS is used to produce post-manufacturing paint additive products, such products must be distributed to and used by only professional personnel engaged in the mixing or blending of paints. Such post-manufacturing paint additive products may not be sold directly to homeowners or nonprofessional painters.

If an in-can preservative is used in combination with FUNGITROL 404DS, its compatibility with FUNGITROL 404DS should be examined first.

DO NOT use in paints designed for applications on food-contact surfaces, or on the interior of buildings engaged in food processing or food handling. DO NOT use in paints designed to be handled by children.

AQUEOUS ADHESIVES
FUNGITROL 404DS 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 404DS 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 404DS 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.

PAPER AND PAPERBOARD APPLICATIONS
CLORTRAM F-40 is for use in industrial applications for nonfood-use paper and paperboard including:

- Packaging soap bars
- Manufacturing file folders, boxes and other storage devices for items to be stored for long periods
Incorporation into or onto paperboard products including: corrugated boxes and cartons, carton board (carrier board), and folding cartons which are used for holding packaged beverage products such as cans, pouches and bottles

- Coverings for insulation, wallboard and other construction materials
- Bottle labels, including water bottles, and other labels

Use at levels of 350 ppm – 5,000 ppm active ingredient in the paper.

FRESHLY SAWN WOOD

FUNGITROL 404DS may be applied to wood and wood products by dip immersion or spray methods to prevent sapstain and surface mold growth on freshly sawn wood.

Mix FUNGITROL 404DS into water-based dip/spray treatment suspensions at the rate of 5 to 10 lbs (1/2 to 1 gallon) per 100 gallons of water. All dip tanks and spray systems will be configured with a recirculation system to ensure the solution remains well mixed during product application. All systems will be designed with a secondary containment system capable of holding 150% of the maximum volume of the dip or spray tank system.

Use the high rate (1 gallon per 100 gallons of water) if the wood to be treated is expected to remain in an undried condition for a prolonged period. Dip freshly 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 the variation in susceptibility of fresh sawn wood related to the type of wood, sawing and storage methods, temperature and humidity conditions, treatment method, 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.

For spray application, apply the treatment suspension by coarse spray using a spray system (e.g., spray tunnel) for producing even and thorough coverage of the wood surface.

The dip/spray treatment vessel may be cleaned by draining and rinsing with clean water or an aqueous detergent solution. Do not dispose of spent treatment suspensions or treatment vessel washings in any manner that may contaminate soil or water.

PRESSURE TREATMENT

Pressure treat wood products before or after dip treatment or add 0.2 to 1 gallons of FUNGITROL 404DS (per 100 gallons of treating solution) to the pressure treating formulation and pressure treat as normal. As for standard dip treatments, maintain agitation during the pressure treating operation.

Note: This method of treatment is not allowed in the state of California

STORE TREATED WOOD in a properly appointed storage area that is not subject to runoff into surface waters. The storage area should be constructed such that the wood is off the ground allowing rapid drainage of treatment suspension and good airflow around the stack. Main alleys should be sufficiently wide to permit good airflow and oriented to take advantage of prevailing winds. The yard should be designed to avoid surface water accumulation and be well maintained to avoid the buildup of wood scraps or other waste that can attract moisture and encourage growth of decay and stain fungi. Vegetative growth in the storage area should also be avoided.
COMPOSITE 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 404DS into the wood composite material while it is being manufactured. Use 1.25 to 12.5 lbs of FUNGITROL 404DS 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 404DS 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.

SURFACE MOLD AND MILDEW CONTROL AND SUPPRESSION OF ALGAE ON CELLULOSIC MATERIALS, WALLBOARD, CONCRETE, MASONRY AND OTHER BUILDING MATERIALS

FUNGITROL 404DS is used to treat cellulosic building materials including, paper, cardboard, wood, plywood, particle board, oriented strand board (OSB), composite wood structural components; and wallboard, concrete, masonry (including aggregate block, brick and stone) and other building materials to inhibit or prevent the growth of surface mold and algal organisms when the materials are subjected to moist or wet environments. Before applying this product, visible mold and algal growth must be removed, and conditions favorable to mold and algal growth must be identified and corrected.

This product is compatible with, and may be mixed with wood protection, products containing disodium octaborate tetrahydrate (DOT). The combination of such DOT containing products with FUNGITROL 404DS may be more efficacious than FUNGITROL 404DS alone. When using a combination system, use the DOT product at the manufacturer's labeled use rate.

When used on the interior sides of living spaces the treated surfaces must be subsequently covered with overlayment materials such as wallpaper, paint, or similar coatings.

DO NOT use on food-contact surfaces, or on the interior of buildings engaged in food processing or food handling.

PREVENTATIVE TREATMENT

To inhibit surface mold and mildew growth on cellulosic materials, wallboard, concrete, masonry and other construction materials for new or renovated building construction, mix FUNGITROL 404DS into water at the rate of 2 gallons (21 lb) per 100 gallons of water (2.5 oz per gallon of water) and apply evenly by paintbrush, airless sprayer, low pressure handwand or backpack sprayer. Assure uniform coverage of surfaces to be protected (approximately 500 square feet per gallon). Surfaces should be evenly wet without runoff or pooling.

When used on interior surfaces, permit treated surfaces to thoroughly dry before painting or affixing overlayment materials such as siding, wallboard or flooring.

Repeat the application of this product as necessary if mold growth appears follow directions provided below for REMEDIAL TREATMENT. Normally, infrequent application (once a year or longer) will provide effective control. If regrowth occurs, investigate to determine the cause and correct the problem prior to reaplication of FUNGITROL 404 DS. Mold may recur in conditions of persistently high humidity, standing water, or hidden water leaks.

REMEDIAL TREATMENT

FUNGITROL 404DS must be used as part of a comprehensive mold remediation or water damage restoration program including:

- Periodic monitoring and inspection of conditions favorable to mold growth such as moisture ingress and high relative humidity
- Effecting repairs as necessary to eliminate conditions favorable to mold growth
- Drying of affected areas to below 20% moisture content
Mix FUNGITROL 404DS into water at the rate of 2 gallons (21 lb) per 100 gallons of water (2.5 oz per gallon of water) and apply evenly by paintbrush, airless sprayer, low pressure handwand, or backpack sprayer.

Assure uniform coverage of surface to be protected (approximately 500 square feet per gallon). Surfaces should be evenly wet without runoff or pooling.

 Permit treated surfaces to thoroughly dry before painting or affixing overlaminate materials such as siding, wallboard or flooring.

The following associations and Internet sites should be consulted for information on standards and guidelines for remedial treatment of mold and mildew:
IAQA- Indoor Air Quality Association (www.iaqa.org)
EPA- Environmental Protection Agency (www.epa.gov)
IICRC-Institute of Inspection, Cleaning and Restoration Certification (http://www.iicrc.org/)

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Small Areas-Total Surface Area Affected Less Than 10 Square Feet

Cleanup Methods*

Wood and Composite Wood Surfaces

Prior to applying FUNGITROL 404DS, clean the affected area using one of the following or another preferred professional method:
Method 1: Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried).
Method 2: Damp-wipe surfaces with plain water or use a wood floor cleaner; scrub as needed
Method 3: High-efficiency particulate air (HEPA) vacuum after the material has been thoroughly dried.
Dispose of the contents of the HEPA vacuum in, well-sealed plastic bags.

Minimum personal protective equipment to be worn during clean-up includes gloves, N-95 respirator and goggles/eye protection.**

Wallboard (drywall and gypsum board)

Prior to applying FUNGITROL 404DS, clean the affected area using high-efficiency particulate air (HEPA) vacuum after the material has been thoroughly dried. Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.
Minimum personal protective equipment to be worn during clean-up includes gloves, N-95 respirator and goggles/eye protection.**

Other Construction Materials

Concrete, Masonry and Porous and Non-porous Hard Surface Substrates.

Method 1: Wet vacuum (in the case or porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried).
Method 2: High-efficiency air (HEPA) vacuum after the material has been thoroughly dried. Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

Special procedures and training are required for remediation of moldy areas larger than 10 square feet.
Consult guidelines for remediation of large areas established by the Indoor Air Quality Association (www.iaqa.org) and the U.S. Environmental Protection Agency (www.epa.gov). An excellent reference is the New York City Department of Health publication, "Guidelines on Assessment and Remediation of Fungi in Indoor Environments." An excellent guide for professional mold remediation is available from the Institute of Inspection, Cleaning and Restoration Certification (IICRC). Standard S520 is based upon reliable remediation and restoration techniques, and
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combines academic principles with practical elements of water damage restoration. Where structural members and/or contents have been exposed to water in excess of 24 hours, there is a possibility of extensive microbial growth that may be hidden. In such a case a complete assessment and remediation plan must be prepared that provides for user and occupant safety and documentation and monitoring of the remediation process. IICRC S520 contains excellent guidance for such a plan. In the context of such a plan, FUNGITROL 404DS can be used on materials to be removed and disposed of and in other applications where mold inhibition is indicated. The Standard must be followed exactly and all growth and contaminated organic material removed prior to using FUNGITROL 404DS. Before using FUNGITROL 404DS in mitigation of large projects, you should be knowledgeable of these guidelines and follow their recommendations.

In the absence of access to the guidance and standards identified, the user should refer to the following information taken from US. EPA's guide: Mold Remediation in Schools and Commercial Buildings (September 2008). These guidelines are based on the area and type of material affected by water damage and/or mold growth. Please note that these are guidelines; some professionals may prefer other cleaning methods.

Use the appropriate remediation steps prior to application of FUNGITROL 404DS.

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Medium-Total Surface Area Affected Between 10 and 100 Square Feet
Cleanup Methods*

** Wood and Composite Wood Surfaces**
Method 1: Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried).
Method 2: Damp-wipe surfaces with plain water or use a wood floor cleaner; scrub as needed.
Method 3: High-efficiency particulate air (HEPA) vacuum after the material has been thoroughly dried.
Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

**Wallboard (drywall and gypsum board)**
Method 1: High-efficiency particulate (HEPA) vacuum after the material has been thoroughly dried.
Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.
Method 2: Discard/remove water-damaged materials and seal in plastic, bags while inside of containment, if present.
Dispose of as normal waste. HEPA vacuum area after it is dried.

**Other Construction Materials**
**Concrete, Masonry and Porous and Non-porous Hard Surface Substrates.**
Method 1: Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried).
Method 2: High-efficiency particulate (HEPA) vacuum after the material has been thoroughly dried.
Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

Limited or Full personal protective equipment is recommended during cleanup.** Limited personal protective equipment includes gloves, N-95 respirator or half face respirator with HEPA filter, disposable overalls, goggles/eye protection. Full personal protective equipment includes gloves, disposable full body clothing, head gear, foot coverings, full-face respirator with HEPA filter.

Use professional judgment, consider potential for remediator exposure and size of contaminated area.

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Large Total Surface Area Affected Greater Than 100 Square Feet or Potential for Increased Occupant or Remediator Exposure During Remediation Estimated to be Significant Wood and Composite Wood Surfaces

Cleanup Methods*
- Method 1: Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried).
- Method 2: Damp-wipe surfaces with plain water or with a wood floor cleaner; scrub as needed.
- Method 3: High-efficiency particulate (HEPA) vacuum after the material has been thoroughly dried.
- Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.
- Method 4: Discard/remove water-damaged materials and seal in plastic bags while inside of containment, if present.
- Dispose of as normal waste. HEPA vacuum area after it is dried.

Wallboard (drywall and gypsum board)

Cleanup Methods*
- Method 1: High-efficiency particulate (HEPA) vacuum after the material has been thoroughly dried.
- Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.
- Method 2: Discard/remove water-damaged materials and seal in plastic bags while inside of containment, if present.
- Dispose of as normal waste. HEPA vacuum area after it is dried.

Other Construction Materials
Concrete, Masonry and Porous and Non-porous Hard Surface Substrates.

Cleanup Methods*
- Method 1: Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried).
- Method 2: High-efficiency particulate (HEPA) vacuum after the material has been thoroughly dried.
- Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

Gloves, disposable full body clothing, head gear, foot coverings, full-face respirator with HEPA filter are the recommended personal protective equipment.**

*Select method most appropriate to situation. Since molds gradually destroy the things they grow on, if mold growth is not addressed promptly, some items may be damaged such that cleaning will not restore their original appearance. If mold growth is heavy and items are valuable or important, you may wish to consult a restoration water damage/remediation expert. Please note that these are guidelines; other cleaning methods may be preferred by some professionals.

**Use professional judgment to determine prudent levels of Personal Protective Equipment and containment for each situation, particularly as the remediation site size increases and the potential for exposure and health effects rises. Assess the need for increased Personal Protective Equipment if, during the remediation, more extensive contamination is encountered than was expected. These guidelines are for damage caused by clean water. If you know or suspect that the water source is contaminated with sewage, or chemical or biological pollutants, then the Occupational Safety and Health Administration (OSHA) requires PPE and containment. An experienced professional should be consulted if you and/or your remediators do not have expertise in remediating contaminated water situations.

Containment of Affected Materials
Total Surface Area Affected Between 10 and 100 Square Feet (All Surfaces)

Use polyethylene sheeting ceiling to floor around affected area with a slit entry and covering flap; maintain area under negative pressure with HEPA filtered fan unit. Block supply and return air vents within containment area.
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Total Surface Area Affected Greater Than 100 Square Feet or Potential for Increased Occupant or Remediation Exposure During Remediation Estimated to be Significant

Use two layers of fire-retardant polyethylene sheeting with one airlock chamber. Maintain area under negative-pressure with HEPA filtered fan exhausted outside of building. Block supply and return air vents within containment area.

TROY CHEMICAL CORPORATION
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