

PROPOSED LABELING

(FRONT PANEL)

ACCEPTED
JUL 31 1984
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
Reg. No. 57534-114

NET CONTENTS 100 POUNDS/45.4 KILOGRAMS

(SDS LOGO)

TUFFCIDE™ 960

**FUNGICIDE
FOR MANUFACTURING USE TO CONTROL MILDEW ON PAINT FILM**

Active Ingredient:	
Chlorothalonil (tetrachloroisophthalonitrile*)	96.0%
Inert Ingredients:	4.0%
TOTAL:	100.0%

*Covered under U.S. Patent Nos. 3,290,000; 3,300,700; 3,300,701

Keep Out of Reach of Children

DANGER

See side panel for additional product safety statement

SDS Biotech Corporation
Agricultural Chemicals Business
Painesville, Ohio 44077

EPA Reg. No. 57534-114

FPA F.R. No. 35982-TX-7

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(LEFT PANEL)

TUPPCIDE™ 960

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Danger

Corrosive, Causes Severe Eye Damage

Do not get in eyes. Wear goggles or full face shield when handling this product.

First Aid: In case of contact with eyes, immediately flush with plenty of water for at least 15 minutes. Seek medical attention for eyes immediately. Call physician.

Avoid contact with skin or clothing. Wash exposed areas of skin with soap and warm water after handling or using.

Do not take internally.

Avoid breathing dust.

Note: TUPPCIDE 960 may produce temporary allergic side effects characterized by redness of the eyes, mild bronchial irritation, and redness or itching of exposed skin areas. Persons having allergic reaction should contact a physician. Affected persons respond to treatment with antihistamines or steroid creams and/or systemic steroids.

Environmental Hazards

This product is toxic to fish. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of waste.

Directions For Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Refer to Product Bulletin PAD-6 for use directions.

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(RIGHT PANEL)

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

Storage: Store in a dry place.

Pesticide Disposal: Pesticide wastes are acutely hazardous. 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.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY AND LIMITATION OF DAMAGES

Seller warrants that this material conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use and Buyer assumes the risk of any use contrary to said directions. Seller makes no other express or implied warranty, including any other express or implied warranty of Fitness or of Merchantability, and no agent of Seller is authorized to do so except in writing with a specific reference to this warranty. In no event shall Seller's liability for any breach of warranty exceed the purchase price of the material as to which a claim is made.

Made in U.S.A.

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TUFFCIDE™ 960

Fungicide for Manufacturing Use
to Control Mildew on Paint Film



SDS Botech Corporation
Agricultural Chemicals Business
7526 Auburn Road, P.O. Box 148
Kalamazoo, Michigan 49001

Product Bulletin

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PAD-8

TUFFCIDE 960 is a broad-spectrum microbicide for control of fungi. Its high degree of activity provides excellent performance characteristics for use as a mildewcide in:

- latex exterior and interior emulsion paints. For exterior paints, use 5-10 pounds per 100 gallons. For interior paints, use 2.5-5 pounds per 100 gallons.
- solvent-based paints at levels of 5-12 pounds per 100 gallons.

TUFFCIDE 960 has several desirable properties which are important in manufacturing fungus-resistant paint:

- extremely low water solubility.
- low vapor pressure.
- fine particle size.
- excellent pH stability.

RECOMMENDATIONS FOR USING TUFFCIDE 960

Latex Emulsion Paints

TUFFCIDE 960, a micronilled powder, is best dispersed during the pigment grinding operation. Grinding equipment normally used in the paint industry is entirely satisfactory.

Generally, 5-10 pounds of **TUFFCIDE 960** per 100 gallons of exterior paint are sufficient for effective mildew control in the paint film. In extreme mildew areas, such as the Gulf Coast, levels of up to 10 pounds are recommended. Levels of 2.5-5 pounds have been found effective in interior latex paint.

TUFFCIDE 960 is compatible with zinc oxide in latex paints.

TUFFCIDE 960 can be used with either unmodified or alkyl modified acrylic, vinyl acrylic or polyvinyl acetate latexes.

If an in-can preservative is used in combination with **TUFFCIDE 960**, its compatibility with **TUFFCIDE 960** should be examined first. Our studies indicate certain in-can preservatives appear to react with **TUFFCIDE 960** to produce a yellowing in the can.

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JUL 31 1984

The Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 249-114

Warranty and Limitation of Damages: The Seller makes no other express or implied warranty, including any other express or implied warranty of fitness or of merchantability, and no agent of Seller is authorized to do so except in writing with a specific reference to this warranty.

Solvent-Based Exterior Paints

TUFFCIDE 960 can be used to aid in protecting solvent-based exterior paint films from mold growth at treatment levels of 5-12 pounds per 100 gallons. Again, dispersion is readily accomplished during the pigment grinding operation. As in the case of latex paints, zinc oxide can be used with **TUFFCIDE 960**.

USE PRECAUTIONS

The following precautions should be observed in handling and using **TUFFCIDE 960**:

Do not get in eyes. **TUFFCIDE 960** is corrosive and capable of causing severe eye damage. **Do not** take internally. Avoid breathing dust. Avoid contact with skin or clothing.

TUFFCIDE 960 may produce temporary allergic side effects characterized by redness of the eyes, mild bronchial irritation and redness or rash on exposed skin areas. Persons having allergic reaction should contact a physician. Affected persons respond to treatment with anti-histamines or steroid creams and/or systemic steroids.

TUFFCIDE 960 is toxic to fish. **Do not** apply directly to water. **Do not** contaminate water by cleaning of equipment or disposal of waste.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

Storage: Store in a dry place.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticides, 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.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

PERSONAL PROTECTIVE EQUIPMENT

Wear goggles or full face shield when handling **TUFFCIDE 960** to protect eyes.

Use protective barrier cream on exposed skin areas.

Wear gloves and protective clothing when handling or using **TUFFCIDE 960** to minimize skin contact.

Do not inhale dust -- wear a respirator if necessary.

Laundry outer garments if exposed to dust or spills. Discard footwear which cannot be decontaminated.

FIRST AID PROCEDURES

Contact with eyes: Flush eyes with plenty of water immediately for at least 15 minutes. Seek medical attention immediately. Call a physician.

Contact with skin: Wash exposed areas of skin with soap and warm water after handling or using **TUFFCIDE 960**. Contaminated clothing including footwear should be thoroughly cleaned before reuse.

Inhalation: Remove to fresh air.

Ingestion: **Do not** induce vomiting. If vomiting occurs spontaneously, keep airway clear. Never give anything by mouth to an unconscious person. Get medical attention.

Allergic reactions: Contact a physician immediately for treatment with antihistamines or steroids.

CONTAINER

TUFFCIDE 960 is shipped in 100-pound net weight polyethylene-lined fiber drums.

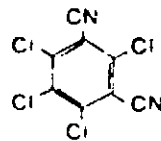
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Product Bulletin

Typical Properties

Chemical Tetrachloroisophthalonitrile*
 Active content, % 96

Structural Formula



Empirical Formula $C_8Cl_4N_2$
 Molecular Weight 265.9
 Melting Range, °C 250-251
 Boiling Point, °C 350 at 760 mm Hg

Vapor Pressure

Temperature, °C	Pressure, mm Hg
40	0.01
170.4	9.2
190.8	17.4
211.5	27.3
229.5	43.3

Hydrolysis Rate Does not hydrolyze in either moderate alkaline (pH = 9) or acidic aqueous media

Physical State 3-5 micron micromilled powder

Color Gray

Odor Pure - Odorless
 Technical - Slight pungent odor

Stability Thermally stable under normal temperature of storage
 Chemically stable in mild to moderate alkaline or acidic aqueous media. Stable to ultraviolet radiation

Corrosivity Noncorrosive to metals

Bulking Factor, gal/lb 0.0667

Specific Gravity (H₂O = 1) 1.8

*U.S. Patents 3,290,353 and 3,351,706
 EPA Reg. No. 50534-117