

50534-114  
PM 21

Pg. 2 of 8

PROPOSED LABELING

(FRONT PANEL)

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

JUL 31 1985

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
50534-114

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. 3,290,353; 3,331,735

Keep Out of Reach of Children

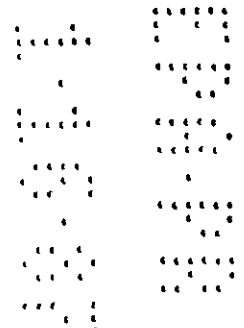
DANGER

See side panel for additional precautionary statements

SDS Biotech Corporation  
Agricultural Chemicals Business  
Painesville, Ohio 44077

EPA Reg. No. 50534-114

EPA Est. No. 35982-TX-1



(LEFT PANEL)

TUFFCIDE™ 960

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

**Danger**

Corrosive, causes severe eye damage. May be a potential skin sensitizer.

Do not get in eyes, on skin, or on clothing. Wear goggles or face shield, rubber gloves, long sleeve shirt, and long pants when mixing, loading and applying this product. May be fatal if inhaled. Do not breathe dust. Wear a mask or pesticide respirator jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health. Harmful if swallowed or absorbed through the skin. Remove contaminated clothing and wash before reuse.

**First Aid:** In case of eye contact, flush eyes with water for 15 minutes; get medical attention immediately. In case of skin contact, wash exposed areas of skin with soap and warm water. This product 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. **Note to physician:** Persons having allergic reaction respond to treatment with antihistamines or steroid creams and/or systemic steroids. In case of inhalation, remove person to fresh air and get medical attention immediately.

**Environmental Hazards**

Do not discharge effluent containing this product directly into lakes, streams, ponds, estuaries, oceans or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the Environmental Protection Agency.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

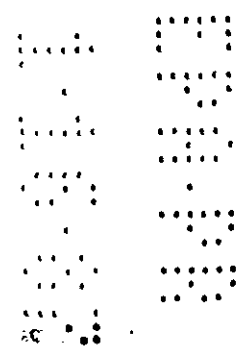
**GENERAL DIRECTIONS**

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

**Note to User:** Technical chlorothalonil 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.

**DIRECTIONS FOR USE**

Refer to Product Bulletin PAD-8 for use directions.



(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.

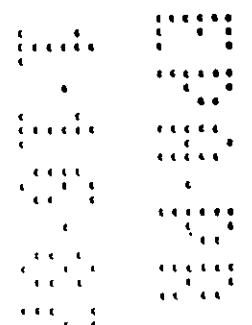
**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide formulation or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the 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 such 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.



**PRODUCT BULLETIN**

(LOGO)  
SDS Biotech Corporation  
Agricultural Chemicals Business  
7528 Auburn Road, P.O. Box 348  
Painesville, Ohio 44077

**TUFFCIDE™ 960**

**Fungicide for Manufacturing Use  
to Control Mildew on Paint Film**

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.

ACCEPTED  
 JUL 1 1985  
 Under the Fungicide Act of 1972  
 registered in the U.S.  
 50534-114

**GENERAL DIRECTIONS**

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

**Note to User:** Technical chlorothalonil 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.

**DIRECTIONS FOR USE**

**Latex Emulsion Paints**

**TUFFCIDE 960**, a micromilled 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 alkyd 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.

**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.

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

**Danger**

Corrosive, causes severe eye damage.

May be a potential skin sensitizer. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield, rubber gloves, long sleeve shirt, and long pants when mixing, loading and applying this product. May be fatal if inhaled. Do not breathe dust. Wear a mask or pesticide respirator jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health. Harmful if swallowed or absorbed through the skin. Remove contaminated clothing and wash before reuse.

**First Aid:** In case of eye contact, flush eyes with water for 15 minutes; get medical attention immediately. In case of skin contact, wash exposed areas of skin with soap and warm water. This product 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. **Note to physician:** Persons having allergic reactions respond to treatment with antihistamines or steroid creams and/or systemic steroids. In case of inhalation, remove person to fresh air and get medical attention immediately.

**Environmental Hazards**

Do not discharge effluent containing this product directly into lakes, streams, ponds, estuaries, oceans or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the Environmental Protection Agency.

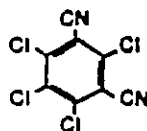


# Product Bulletin

## Typical Properties

Chemical ..... Tetrachloroisophthalonitrile<sup>\*</sup>  
 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 ..... 0.0887

Specific Gravity (H<sub>2</sub>O = 1) ..... 1.6

<sup>\*</sup>U.S. Patents 3,290,353 and 3,331,735  
 EPA Reg. No. 50534-114