

# Cleary MATERIAL SAFETY DATA SHEET

3336® F

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Please read the entire document. This Material Safety Data Sheet contains important environmental, health and toxicology information for your employees, and anyone who will use, transport, store, dispose of or handle this product. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information contained herein must be incorporated in your MSDS.

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3336 F  
**EPA REGISTRATION NUMBER(S):** 1001-69  
**CHEMICAL NAME:** Dimethyl-4-4'-o-phenylenebis-3-thioallophanate  
**SYNONYM:** Thiophanate methyl  
**GENERAL USE:** Turf and ornamental fungicide  
**FRAC GROUP CODE:** 1

### COMPANY

Cleary Chemicals LLC  
11901 S. Austin Avenue  
Alsip, IL 60803

### EMERGENCY TELEPHONE NUMBERS

CLEARY CHEMICALS LLC  
M-F 9-5 CST  
**(800) 345-3330**

PROSAR:  
**(877) 325-1840**  
CHEMTREC 24 HOUR:  
**(800) 424-9300**

## SECTION 2: INFORMATION ON INGREDIENTS

Active Ingredient(s)/ Hazardous Inert Ingredient(s)	% by Wt.	CAS#	ACGIH TLV	OSHA PEL
Dimethyl-4-4'-o-phenylenebis- 3-thioallophanate	41.25	23564-05-8	NDA	NDA

## SECTION 3: HEALTH HAZARD INFORMATION

### Acute Health Hazards

**Inhalation:** N/A

**Eye Contact:** May cause transient irritation.

**Ingestion:** May cause irritation.

**Skin Contact:** Non-irritating, not a known sensitizer.

**Chronic Effects of Overexposure:** Irritation of eyes, nose and throat, dermatitis, headache and nausea.

## SECTION 4: FIRST AID MEASURES

**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further 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 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 further treatment advice.

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#### SECTION 4: FIRST AID MEASURES (continued from page 1)

**If Swallowed:** Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. For 24-Hour Emergency Assistance Call Chemtrec 1-800-424-9300

#### SECTION 5: FIRE AND EXPLOSION INFORMATION

**Flash Point (Method):** NA

**Flammable Limits (vol % in air):** NA

**Autoignition Temperature:** NA

**Extinguishing Media:** Carbon dioxide, foam, water, earth, dry chemical.

**Special Fire Fighting Procedures:** Self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards:** None

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

**Steps to be Taken in Case Material is Released or Spilled:** Absorb with sand or inert material, sweep or scoop up and remove, flush area with water. Dispose of in compliance with all federal, state and local laws.

#### SECTION 7: HANDLING AND STORAGE

**Precautions to be Taken in Handling and Storing:** Store in original sealed containers in a cool dry area not accessible to children or unauthorized persons.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Protective Clothing:** Long sleeve shirt, pants, or coveralls, water resistant boots.

**Eye Protection:** Chemical goggles or safety glasses with side shields recommended when handling concentrate.

**Ventilation:** Use product outdoors or in a well ventilated area.

**Respiratory Protection:** For exposures in enclosed areas: a respirator with either an organic vapor-removing cartridge with a NIOSH approved organic vapor (OV) cartridge or canister with any N, R, P, or HE filters.

**Other:** Protective barrier cream may be applied on exposed skin areas.

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Off-white liquid suspension, faint sulfur odor.
<b>Boiling Point:</b>	212° F
<b>Vapor Pressure (@25° C):</b>	7.12 x 10 <sup>-8</sup> mm Hg
<b>pH:</b>	6.8-7.2
<b>Melting Point:</b>	NA
<b>Freezing Point:</b>	28° F
<b>Specific Gravity (25° C):</b>	1.198 @ 20/21° C
<b>Vapor Density:</b>	NA
<b>Evaporation Rate:</b>	NA
<b>Solubility in Water:</b>	Insoluble (dispersible)
<b>% VOC:</b>	5.09%

**SECTION 10: STABILITY AND REACTIVITY**

**Stability:** Stable

**Incompatible Materials:** Highly alkaline materials, oxidizing agents, lime sulfur, bordeaux mixture, copper compounds.

**Conditions to Avoid:** Extreme heat

**Hazardous Decomposition:** Thermal decomposition generates oxides of nitrogen, sulfur, and carbon.

**Hazardous Polymerization:** NA

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Oral (Acute) LD50:** > 6000 mg/kg (rat)

**Dermal (Acute) LD50:** > 2,000 mg/kg (rabbit)

**Inhalation (acute):** > 20.8 mg/L (LC50 rat 4 hour)

**Chronic (oral):** No oncogenicity, no observed effect level, 160 ppm in diet for two years (rat) and 50 mg/kg/day in single dose for two years (dog).

**NOEL:**

**Subchronic (oral):** No observable effect level, 1,600 ppm in diet for 180 days (rats and mice).

**Neurotoxicity:** No delayed neurotoxicity or cholinesterase inhibition.

**Oncogenicity:** No oncogenicity to mice consuming diets containing levels as high as 640 ppm over a two year period.

**Teratogenicity:** No teratology to rats or mice dosed throughout pregnancy with levels as high as 1,000 mg/kg/day.

**Reproductive Toxicity:** No effect on spermatogenesis, testosterone assimilation. Three generation study showed no evidence of effects on fertility, fecundity or offspring.

**Mutagenicity:** Ames, Mammalian Somatic, Cytogenicity, Dominant Lethal, DNA Damage/Repair, all test negative.

**SECTION 12: ECOLOGICAL INFORMATION**

This pesticide is toxic to fish. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by disposal of equipment washwaters. Do not apply, allow to drift, or drain or flush equipment onto non-target areas.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Methods:** Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by intended use according to label instructions, contact the appropriate agency in your state or the nearest EPA Regional Office for guidance.

**SECTION 14: TRANSPORTATION INFORMATION****DOT**

**< 2 gallons per completed package**

Non Regulated

**≥ 2 gallons but < 119 gallons per completed package**

UN 3082, Environmentally hazardous substances, liquid, n.o.s., 9, III, (thiophanate-methyl), RQ

**≥ 119 gallons per completed package**

UN 3082, Environmentally hazardous substances, liquid, n.o.s., 9, III, (thiophanate-methyl), Marine Pollutant, RQ

**IMDG**

UN 3082, Environmentally hazardous substances, liquid, n.o.s., 9, III, (thiophanate-methyl), Marine Pollutant

**IATA**

Non Regulated

## SECTION 15: REGULATORY INFORMATION

**EPA SARA Title III Data:** Positive rating for acute hazard

**Section 302 Substances:** NA

**RCRA Waste Number:** U409

**Section 311/312 Hazardous Categories:** NA

**Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)**

**Immediate Health:** Yes

**Delayed Health:** Yes

**Fire:** No

**Reactive:** No

**Sudden Pressure:** No

**Section 313 Toxic Chemicals:** This product does contain chemical(s) which are defined as toxic chemicals under and subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Thiophanate Methyl

**CERCLA RQ:** 1 lb.

**California Prop 65: Developmental Toxins**

This product does contain the following chemical as indicated below, currently on the California list of Developmental Toxins.

Thiophanate methyl

**NFPA Ratings:** Flammability: 0 Reactivity: 0 Health: 1

## SECTION 16: OTHER INFORMATION

Please note: Cleary Chemicals LLC believes that the information and recommendations contained herein are accurate as of the date hereof. The information provided herein applies only to the specific product designated and may not be valid where said product is used in combination with any other material or in any process. It is the user's responsibility to determine the suitability of the information for their purposes. No warranty of fitness for any particular purpose, warranty of merchantability, or any other warranty, expressed or implied, is made concerning the information provided.

<b>Reason for issue:</b>	Update Section 1
<b>Prepared by:</b>	C. Hitchcock
<b>Effective date:</b>	05.28.13
<b>Replaces:</b>	02.26.13

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