

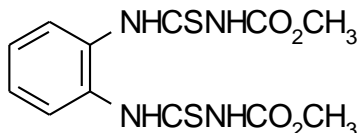
MATERIAL SAFETY DATA SHEET

Apocalypse 70% WP

Thiophanate Methyl 70% WP

SECTION 1. IDENTIFICATION OF THE SUBSTANCE

Common name: Thiophanate Methyl
 Form: WP
 Chemical Name: dimethyl 4,4'-(o-phenylene)bis(3-thioallophanate)
 Formula: $C_{12}H_{14}N_4O_4S_2$
 Mol. wt: 342.4
 Structure:



SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance	Conc.	Uses
Active ingredient		
Thiophanate Methyl	70%	Fungicide
Inert ingredient		
Others	30%	
Total	100%	

SECTION 3. HAZARDS IDENTIFICATION

Effects of overexposure

Moderately irritating to skin and eye, harmful if swallowed, may cause irritation of the nose and throat and cause coughing and chest discomfort if inhalation.

Hazardous Decomposition Products

Maybe decompose at high temperature forming toxic gases.

SECTION 4.FIRST AID MEASURES

Eye	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.
Skin	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.
Ingestion	Do not give any liquid to the person. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Inhalation:	Move person to fresh air. If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

Note to physician No antidote is available. Treat patient symptomatically.

SECTION 5.FIRE FIGHTING MEASURES

Flammability: Not auto flammable

Extinguishing media: Foam, Carbon dioxide, Dry chemical or Water spray (fog)

Thermal decomposition products: Non known

Special fire fighting methods: Use self contained breathing apparatus

Unusual fire or explosion hazards: None

SECTION 6.ACIDENTAL RELEASE MEASURES

Isolate area. Avoid skin contact. Use recommended protective equipment while carefully sweeping up and place in covered container for re-use if possible. Scrub contaminated area with soap and water. Repeat and rinse with water. Prevent contamination of streams, sewers or other waterways.

SECTION 7.HANDLING AND STORAGE

Store the material in a well ventilated, secure area out of reach of children and domestic animals. Do not store food, drink in areas where they may become contaminated with this material. Wash thoroughly after contact the material. Keep only in the original container.

SECTION 8.EXPOSURE CONTROL/PERSONAL PROTECTION

Applicators and other handlers must wear:

Coveralls over short-sleeved shirt and short pants.

Chemical-resistant footwear plus socks.

Chemical-resistant gloves, such as barrier laminate or butyl rubber.

Protective eyewear.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Flowability	Free flow
Physical state	powder
Color	white
Appearance density	0.98 gm/cm ³ (CIPAC F p.11 MT 3)
pH solution 10%	4.8 - 5
Persistent foam test	Accepted (CIPAC F p. 140 MT43)

SECTION 10.STABILITY AND REACTIVITY

Chemical Stability: Stable at normal temperatures and storage conditions.

Condition to avoid: Non known

Materials to avoid: Strong oxidizing agents

Polymerization: Polymerization will not occur.

Hazardous decomposition products:

Maybe decompose at high temperature forming toxic gases.

SECTION 11.TOXICOLOGICAL INFORMATION

Acute oral toxicity	LD50 for rats 1470 mg/kg
Acute dermal toxicity	LD50 for rats >2000mg/kg
Acute inhalation toxicity	LC50 (rat, 4hr) for rats >30mg/l (tech)
Skin irritation	Irritant to skin (rabbit)
Eye irritation	Irritant to eye (rabbit)
Sensitization	Not a sensitiser (Guinea pig)
Reproductive/ developmental effects:	None observed
Chronic/Subchronic toxicity:	None observed
Carcinogenicity:	None observed.
Other toxicity information:	
Toxicity class:	WHO (a.i.) III

SECTION 12. ECOLOGICAL INFORMATION

Birds Low toxic to birds.
Fish: Toxic to fish, LC50 (48h) for carp 2.2mg/l (tech.)
Daphnia: LC50 (24h) 3.5mg/l (tech)
Bees: No toxic to honeybees
Environmental Fat :Strongly absorbed by soils.

SECTION 13. DISPOSAL INSTRUCTION

Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are acutely hazardous. Triple rinse (or equivalent) the container. Then offer for recycling or reconditioning. If allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 14. TRANSPORT INFORMATION

Class : 9
UN No. : 3077
Packing Group : III

SECTION 15. REGULATORY INFORMATION

EU- Classification Hazard Symbol Xn Harmful
Special Risks (R-Phrases) R21/22 Harmful in contact with skin and if swallowed R40 Limited evidence of a carcinogenic effect
Safety Advice (S- Phrases) S2 Keep out of the reach of children S13 Keep away from food, drink and animal feeding stuffs S22 Do not breathe dust S36/37 Wear suitable protective clothing and gloves
International WHO Toxicity Classification II Moderately toxic

SECTION 16. OTHER INFORMATION

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

Proper use is as an agricultural fungicide. Use according to label instructions.