EPA Reg. No. 60063-50

MATERIAL SAFETY DATA SHEET

Sipcam Agro USA, Inc.
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In Case of Emergency, Call
Sipcam Agro USA, Inc.: 919-226-1195
CHEMTREC: 800-424-9300

I. GENERAL INFORMATION

1-Slight Health Hazard 0-Noncombustible 0-Nonreactive

Above: Ratings based on NIOSH "Identification System for Occupationally Hazardous Materials" (1974).

II. TRANSPORTATION INFORMATION

This product is regulated for transportation purposes as follows:

MODE	*BULK (> 119 GALLONS)*	*NON-BULK (< 119 GALLONS)*
IMO (Water):	Yes	No
DOT (Land):	Yes	No
IATA (Air):	Yes	No

DOT Regs (ground): Non-regulated
IMDG (Water), UN3082, Enviromentally Harzardous Substance, Liquid, NOS, (Tebuconazole), 9, III, Marine Pollutant
IATA (Air), UN3082, Enviromentally Harzardous Substance, Liquid, NOS, (Tebuconazole), 9, III;
DOT shipping Class 55, NMFC 155050-06
Special Provisions: Marine pollutant

SARA TITLE III INFORMATION

313 Inventory Ingredients: Chlorothalonil (30.51% wt/wt); Tebuconazole (8.47%)
312 Hazards Classification: Acute and Chronic Health (See Section V for Health Hazard Information)

III. PRODUCT IDENTIFICATION

Product Names: PrimeraOne Platinum ChlorTeb ETQ
Synonyms (active ingredient): Tetrachloroisophthalonitrile, Chlorothalonil
Alpha-[2-(4-chlorophenyl)ethyl]-alpha-(1,1,-dimethylethyl-1H-1,2,4-triazole-1-ethanol, Tebuconazole

IV. HAZARDOUS INGREDIENTS

The substances listed below are those identified as hazardous chemicals under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Component	CAS No.
Tetrachloroisophthalonitrile	1897-45-6
Alpha-[2-(4-chlorophenyl)ethyl]-alpha-(1,1,-dimethylethyl-1H-1,2,4-triazole-1-ethanol	80443-41-0

Exposure Limits for PrimeraOne Platinum ChlorTeb ETQ:

ACGIH-TLV: Not Established

OSHA-PEL: Not Established

PROPOSITION 65
Chlorothalonil: This product contains a chemical known to the State of California to cause cancer.

V. PHYSICAL DATA

Boiling Point (760 mm Hg): 100°C (water)
Melting Point: Not Applicable

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Freezing Point:	Not Established
Specific Gravity (H20=1):	1.19
Vapor Pressure:	Not Established
Vapor Density (Air = 1):	Not Established
Solubility in H20, % by Wt.:	Not Soluble - disperses
% Volatiles by Vol.:	Not Established
Evaporation Rate (Butyl Acetate = 1):	Not Established
Appearance and Odor:	Liquid, very light beige, mild odor
Density at 20°C:	9.93 #/gal
pH:	5.61

VI. FIRE AND EXPLOSION DATA

Flash Point:	Nonflammable
Autoignition Temperature:	Not Applicable
Flammable Limits in Air, % by Volume:	Noncombustible Lower: Not Applicable Upper: Not Applicable
Extinguishing Media:	Carbon dioxide, foam, dry chemical or water.
Special Fire Fighting Procedures:	Self-contained breathing apparatus should be provided for firefighters.
Unusual Fire and Explosion Hazards:	May decompose under fire conditions emitting toxic and irritant gases (i.e. hydrogen chloride) to the respiratory tract.

VII. HEALTH HAZARD INFORMATION[1]

Oral LD50 (rat):	>5000 mg/kg (U.S. EPA Category IV)
Dermal LD50 (rabbit):	>5050 mg/kg (U.S. EPA Category III)
Inhalation (4-hour) LC50 (rat):	>2.23 mg/liter of air (U.S. EPA Category III)
Primary Dermal Irritation Index (rabbit):	Non-irritating (U.S. EPA Category IV)
Primary Eye Irritation (rabbit)	Non-irritating (U.S. EPA Category III)
Dermal Sensitization:	Non-sensitizer

Emergency and First Aid Procedures

IF INHALED: Move 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 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 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 SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have affected person sip a glass of water if able to swallow. Do not induce vomiting unless told by a 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 going for treatment.

[1] For transportation purposes, refer to 49 CFR 173.132 (b) (3)

NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Persons having a temporary allergic reaction respond to treatment with antihistamines or steroid creams and/or systemic steroids.

Effects of Chronic Overexposure

Chlorothalonil: Repeated excessive dermal exposure may cause marked skin irritation and may increase the possibility of allergic reactions. Studies on rats and mice have suggested that technical chlorothalonil, when fed at high levels in the diet, may have oncogenic potential to these laboratory animals. However, neither chlorothalonil nor its metabolites interact with DNA and thus are not mutagenic. Tumor formation has been related to a non-genotoxic mechanism of action from which threshold levels have been established on rats and mice. Comprehensive dietary and worker exposure studies have shown exposure levels for humans to be well below these threshold levels - in addition, surveillance of chlorothalonil plant workers for many years has not demonstrated any increase in oncogenic potential to humans.

Tebuconazole: Based on animal toxicity studies on the active ingredient, there may be toxic effects on the following organs following chronic repeated exposure: spleen, liver, adrenal gland, and lens of the eye.

In dermal toxicity studies using rabbits, the active ingredient was administered at doses up to and including 1000 mg/kg for 6 hours/day, 5 days/week for a period of 3 weeks. There were no local or systemic effects observed at any of the levels tested.

The no-observed-effect-level (NOEL) was 1000 mg/kg.

In a 3-week inhalation study, rats were exposed to the active ingredient for 6 hours/day, 5 days/week at aerosol concentrations of 1.2, 10.6, or 155.8 mg/cubic meter of air. Liver enzyme effects were observed at the high concentration. The NOEL was 10.6 mg/cubic meter of air.

In chronic dog studies, the active ingredient was administered for 52 weeks at dietary concentrations of 40, 100, 150, 200 or 1000 ppm. Due to a lack of significant effects, the high dose was increased to 2000 ppm at 40 weeks for the remainder of the study. At the high dose, effects relating to liver, spleen, ocular and adrenal were observed. The overall NOEL from these studies was 100 ppm based on adrenal effects.

In a 2-year study, the active ingredient was administered to rats at dietary concentrations of 100, 300 or 1000 ppm. There was a reduction in body weight gains and an increased incidence of liver and spleen effects at the high dose. The NOEL was 300 ppm.

The active ingredient was investigated for carcinogenicity in feeding studies using rats and mice. There was no indication of a carcinogenic effect in rats or mice when tested at dose levels up to and including the maximum tolerated dose (MTD) for each species. An increased incidence of hepatocellular neoplasms occurred in mice at a dose level approximately three fold greater than the MTD.

The active ingredient has been evaluated for developmental toxicity in oral studies using mice, rats and rabbits. In mice treated at dose levels ranging from 1-100 mg/kg, the NOELS for maternal and developmental toxicity were 3 and 10 mg/kg, respectively. When rats were treated at dose levels of 30, 60 or 120 mg/kg, the NOELs for maternal and developmental toxicity were 30 and 60 mg/kg, respectively. For rabbits treated at dose levels of 10, 30 or 100 mg/kg, the NOELs for maternal and developmental toxicity were less than 10 and 30 mg/kg, respectively. In dermal teratology studies on rats and mice, the active ingredient was administered during gestation at dose levels of 100, 300 or 1000 mg/kg. In rats, there was no indication of maternal or developmental toxicity; therefore, the maternal and developmental NOEL was 1000 mg/kg. In mice, the NOELs for maternal and developmental toxicity were 100 and 300 mg/kg, respectively.

In a reproduction study, the active ingredient was administered to rats at dietary concentrations of 100, 300 or 1000 ppm for 2 generations. Smaller litter sizes and decreased pup weight gain was observed in conjunction with maternal toxicity at the high concentration. The maternal and reproductive NOEL was 300 ppm.

VIII. REACTIVITY DATA

Conditions Contributing to Instability: Under normal use conditions, this product is stable.

Incompatibility: Not known.

Hazardous Decomposition Products: May decompose under fire conditions emitting gases and vapors (i.e. hydrogen chloride) which may be toxic and irritating to the respiratory tract.

Conditions Contributing To Hazardous Polymerization: Material not known to polymerize.

IX. SPILL OR LEAK PROCEDURES

Steps To Be Taken If Material Is Released Or Spilled:

This product is toxic to fish. Keep out of lakes, streams or ponds.

Isolate area and keep unauthorized people way. Do not walk through spilled material. Avoid breathing vapors and skin contact. Remove sources of ignition if combustible or flammable vapors may be present and ventilate area. Wear proper protective equipment. Dike contaminated area with absorbent granules, soil, sand, etc. If large spill, material should be recovered. Small spills can be absorbed with absorbent granules, spills control pads, or any absorbent material. Carefully sweep up absorbed spilled material. Place in covered container for reuse or disposal. Scrub contaminated area with soap and water. Use dry absorbent materials such as clay granules to absorb and collect wash solution for proper disposal. Contaminated soil may have to be removed and disposed. Do not allow material to enter streams, sewers or other waterways or contact vegetation.

Waste Disposal Method:

Waste portions of this product and contaminated absorbent materials may be disposed of by incineration provided the following conditions are observed:

Incinerate in a suitable oven fed by a mixture of air and methane, at 1100-1200° C temperature;

The HCl which may form in the incinerator exhaust gas must be conveyed into an aqueous absorption system containing 18-20% of $Ca(OH)_2$.

X. INDUSTRIAL HYGIENE CONTROL MEASURES

Ventilation Requirements

Good industrial hygiene practice dictates that indoor work areas be isolated and provided with adequate local exhaust ventilation. Work upwind in out-of-doors batch operations.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY:	NIOSH - approved dust respirators or pesticide respirators
EYE:	Chemical goggles or face shields.
GLOVES:	Chemical-resistant gloves made of waterproof material, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyethylene, polyvinyl chloride, or viton.

OTHER CLOTHING AND EQUIPMENT

Protective clothing consisting of long sleeve shirt and long pants, shoes plus socks, and chemical-resistant gloves made of waterproof material (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyethylene, polyvinyl chloride, or viton) should be worn when handling this product. The clothing should be changed at least daily. Persons exposed routinely to this active material should shower prior to leaving work each day. Safety shower and eye-wash stations should be provided in all areas in which this product is stored and/or handled. Contaminated clothing should be removed and washed thoroughly before re-using.

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