



UPDATED PRODUCT CODE: 069258, 06958B, 06958C
VERSION DATE: 6/2007

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MATERIAL SAFETY DATA SHEET

----- 1. CHEMICAL PRODUCT and COMPANY IDENTIFICATION -----

Product Name: TAKTIC™ EC
Product Family: PHARMACEUTICALS

PRODUCT

TAKTIC™ EC

PRODUCT CODE

069258
06958B
06958C

SYNONYMS:

TAKTIC EMULSIFIABLE CONCENTRATE

PRODUCT USE: This miticide/insecticide is used for the control of ticks, manage mites and lice on beef cattle, dairy cattle and swine. Refer to product insert for proper usage.

COMPANY ADDRESS - Intervet Inc - 29160 Intervet Lane- Millsboro, DE 19966

----- 2. COMPOSITION / INFORMATION on INGREDIENTS -----

HAZARDOUS COMPONENT:

CONCENTRATION:

CAS NUMBER:

AMITRAZ

33089-61-1

INERT INGREDIENTS CONTAINING:
TRIMETHYL BENZENE

25551-13-7

XYLENE

1330-20-7

CUMENE

98-82-8

----- 3. HAZARDS IDENTIFICATION-----

ROUTES OF ENTRY: *Dermal, Injection, Inhalation, Ingestion*

EMERGENCY: HUMAN, FIRE, SPILL OR ENVIRONMENTAL: 1-800-228-5635 EXT. 132 24 HRS.
ANIMAL: 1-800-345-4735 EXT. 104 24 HRS.
CHEMTREC® FOR CHEMICAL EMERGENCY SPILL, LEAK, FIRE: 1-800-424-9300

PRODUCT INFORMATION: 1-800-835-0541 OR 1-302-934-8051 9:00 A.M. – 5:00 P.M. EST



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ACUTE EFFECTS OF EXPOSURE: *Corrosive. Causes irreversible eye damage. Causes skin irritation. Harmful if swallowed or absorbed through skin or inhaled. Do not get in eyes, on skin or on clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before use.*

SIGNS AND SYMPTOMS OF EXPOSURE: *May cause central nervous system depression, bradycardia, hypotension, or hypothermia following ingestion or inhalation of high concentrations. Amitraz has caused transient skin flushing or dermatitis in some individuals.*

IMMEDIATE EFFECTS

SKIN: *A moderate skin irritant, not corrosive to the skin. May cause allergic reactions in certain individuals. May be a sensitizer in humans who have repeated dermal exposures to the product.*

EYES: *A severe eye irritant. May cause corrosive effects to the eyes.*

INHALATION: *Harmful if inhaled. Excess inhalation of solvent vapor may produce central nervous system depression, bradycardia, hypotension, and hypothermia.*

CHRONIC EFFECTS OF EXPOSURE: *None known*

CARCINOGENIC EFFECTS: *This product is not considered a carcinogen and is not listed by OSHA, IRAC or NTP. EPA has put amitraz in Carcinogenicity Category C with Q (Quantity Risk Assessment) (high C), based on the occurrence of liver tumors in female mice at doses above the maximum tolerated dose.*

----- 4. FIRST AID MEASURES -----

SKIN: *Wash immediately affected area with soap and water. Contact a physician.*

EYES: *Immediately flush with plenty of water for fifteen minutes. Contact a physician.*

INHALATION: *Remove to fresh air. If not breathing, give artificial respiration and call for medical help immediately.*

INGESTION: *Seek medical attention immediately.*

NOTE TO PHYSICIAN: *Amitraz, the active ingredient in this product, is not an organophosphorous compound. Do not use atropine as an antidote. Treat any overexposure symptomatically. Mucosal damage is probable which increases the risk of gastric lavage. The presence of petroleum distillate in this product may pose an aspiration pneumonia hazard.*

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----- 5. FIRE FIGHTING MEASURES -----

FLAMMABILITY: *Taktic EC is a flammable liquid. Flashpoint closed cup: 39.0C (102.2F)*
PRODUCTS OF COMBUSTION: *Will burn to evolve toxic oxides of nitrogen.*

EXTINGUISHING METHODS: *Use Water, Water Mist, Foam or Dry Chemical to extinguish fire. For fighting large fire wear full bunker gear, including SCBA. Keep upwind. Prevent fire run-off from entering lakes or streams.*

----- 6. ACCIDENTAL RELEASE MEASURES -----

PROCEDURES IN CASE OF SPILL OR LEAK: *Wear appropriate personal protective equipment for spill clean up. For small spills absorb with sand or other non-combustible material. Place in a secure container for disposal. Wash area thoroughly with detergent and water. Inform authorities immediately if material enters sewers or watercourse.*

----- 7. HANDLING and STORAGE -----

STORAGE: *Do not store near heat or open flame. Store in a cool dry place. Keep from freezing. Do not open container until ready to use. Use entire contents of can once opened. Keep out of reach of children. Do not storage in or around the home environment.*

SHELF LIFE: *See expiration date on product label.*

HANDLING PRECAUTIONS: *Do not use near heat or flame. Harmful if inhaled, swallowed, or absorbed through the skin. Avoid contact with eyes, skin or clothing. Avoid breathing vapor or mist. Wash thoroughly with soap and water after handling. Also wash before eating, drinking, smoking or urinating.*

----- 8. EXPOSURE CONTROL / PERSONAL PROTECTION -----

EYES: *Prevent eye contact by wearing appropriate eye protection for handling tasks.*

SKIN: *Avoid skin contact. Wear chemical resistant apron or coveralls over long-sleeved shirt and long pants, footwear plus socks, gloves and headgear for overhead exposure. Goggles or face shield, and chemical resistant apron when cleaning equipment, mixing or loading. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.*

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RESPIRATOR PROTECTION: *The degree of protection required in a situation depends upon duration of tasks and concentration of contaminants in the air. If ventilation is inadequate wear an organic vapor cartridge respirator or an SCBA.*

EXPOSURE GUIDELINES:

TRIMETHYL BENZENE:

OSHA PEL	ACGIH TLV	CUMENE	ACGTH TLV
25 PPM (TWA)	25 PPM (TWA)	OSHA PEL	50 PPM (TWA)
		50 PPM (TWA)	

XYLENE

OSHA PEL	ACGIH TLV	Aromatic Hydrocarbon
100 PPM (TWA)	100 PPM (TWA)	Manufacturer recommendation
150 PPM (STEL)	150 PPM (STEL)	50 ppm (TWA)

----- 9. PHYSICAL and CHEMICAL PROPERTIES -----

APPEARANCE: *Yellow to brown liquid.*

PH: 8.54 @ 23C

ODOR: *Aromatic hydrocarbon*

VAPOR PRESSURE: *<10.0 mmHg (100F)*

BOILING POINT: *106.0C (222.8F) (estimated)*

DENSITY: *0.91 g/cubic centimeter @25C*

FLASH POINT: *40C by Pensky Martins Closed Cup Test.*

----- 10. STABILITY and REACTIVITY -----

CHEMICAL STABILITY: *Stable*

CONDITIONS TO AVOID: *None known*

INCOMPATIBILITY: *None Known*

HAZARDOUS POLYMERIZATION: *Will not occur*

----- 11. TOXICOLOGICAL INFORMATION -----

Oral LD 50 Rat: *2837 mg/kg*

Dermal LD 50 Rat: *>2000 mg/kg*

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Inhalation LC 50 Rat: 0.55<LC 50<2.07
Intraperitoneal LD50 (rat): Not available
Intraperitoneal LD50 (mouse): Not available

Chronic: In a two year feeding study with amitraz technical, no toxic effects were observed in rats at dose levels up to 50ppm at the highest dose (200 ppm), only a reduction in weight gain and nervous, aggressive behavior were observed. In a similar study, female mice fed the highest test dose (400-ppm) were observed to have excess weight depression, physiological effects, and an increased incidence of liver tumors. However, male mice receiving the same doses (100 and 400 ppm) showed no such effects. In the absence of any other evidence of carcinogenicity or mutability, it has been concluded that amitraz is unlikely to be a human carcinogen. Dogs fed doses of amitraz at levels up to 1mg/kg/day showed slight central nervous system depression and hypothermia however, these symptoms subsided after the first two days.

Mutagen: Amitraz is not mutagenic or genotoxic when tested in the Ames gene mutation assay and in five other mutagenesis systems.

Teratogenicity: Amitraz is not teratogenic in the rat or rabbit at doses up to 30 or 12 mg/kg/day.

Reproductive: Amitraz demonstrated no effect on impairment of fertility or maintenance of progeny in rats when fed with dietary doses up to the highest test dose (20 mg/kg/day) in a 3-generation reproduction study. At the top dose, high mortality of the offspring was observed and it occurred during the early and late suckling period, indicating an effect of lactation. Amitraz at high doses has been shown to suppress prolactin levels in rodents; therefore, these data do not suggest a hazard to workers or consumers exposed to amitraz.

----- 12. ECOLOGICAL INFORMATION-----

ECOTOXITY: This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to inter-tidal areas below the mean watermark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

----- 13. DISPOSAL CONSIDERATIONS-----

Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are toxic. 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, Environmental Control agency or the hazardous waste representative at the nearest EPA regional office for guidance.

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----- 14. TRANSPORTATION -----

DOT SHIPPING INFORMATION

DOT PROPER SHIPPING NAME: ORM-D (limited quantities, via ground shipment)

AIR EXCEPTION: DOT PROPER SHIPPING NAME: *Flammable Liquid N.O.S. (via air shipment)*

DOT HAZARD CLASS: 3

UN/NA IDENTIFICATION NUMBER: *UN 1993*

PACKING GROUP: *III*

TECHNICAL CONSTITUENTS(S): *Trimethylbenzene, Xylene)*

REPORTABLE QUANTITY (RQ): *42, 283 lbs based on xylene*

ER GUIDEBOOK NUMBER: 27

DOT LABEL: *Flammable liquid (note: No label required if inner pkg , 1 gallon and transported via ground.*

----- 15. REGULATORY INFORMATION -----

STATE REGULATIONS: *The following chemicals associated with the product are associated with the product are subject to the Right-To-Know regulations in these states:*

AMITRAX (33089-61-1) : MA

BENZENE, TRIMETHYL (25551-13-7) : FL, LA, MA, NJ, PA, IR

XYLENE (1330-20-7) : CT, FL, LA, MA, MI, NJ, NY, PA, RI

CUMENE (98-82-8) : CT, FL, IL, LA, MA, NJ, NY, PA, RI

US FEDERAL REGULATIONS: *This is a registered insecticide under US EPA FIFRA regulations. The EPA Registration Number is 54382-3.*

XYLENE : 2.365% (1330-20-7)

CUMENE : 2.365% (98-82-8)

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SARA TITLE III (SECTIONS 313/312) HAZARD CATEGORIES:

Acute: Yes Fire: Yes Reactivity: No
Chronic: No Pressure: No

ENVIRONMENTAL:

CERCLA : CUMENE (98-82-8)
XYLENE (1330-20-7)
SARA 304 : CUMENE (98-82-8)
XYLENE (1330-20-7)
SDWA MCL : XYLENE (1330-20-7)

-----**16. OTHER INFORMATION**-----

DISCLAIMER:

The information contained herein is true and accurate to the best of the knowledge of Intervet Inc. However, all data, instructions and/or recommendations are made without guarantee. The buyer and handler assume all risk and liability of use, storage and/or handling of this product not in accordance with the terms of the product label.

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