



MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF PRODUCT AND COMPANY

Pfizer Inc	Emergency telephone	1-866-531-8896
Pfizer Animal Health	Hours of operation	24 Hours
235 East 42nd Street	Telephone	1-800-366-5288
New York, NY 10017		

Trade names	DECTOMAX®
Product name	Doramectin Injectable Solution 10 mg/ml
Chemical family	Avermectin macrocyclic lactone
Therapeutic use	Antiparasitic (veterinary); endectocide
Description	Amber oil

SECTION 2 - COMPOSITION

<u>Ingredient</u>	<u>CAS Number</u>	<u>Amount</u>
Doramectin*	117704-25-3	1.0%
Phenol*	108-95-2	<1.0%
Ethyl oleate*	111-62-6	Trade secret
Sesame oil*	8008-74-0	Trade secret

*Hazardous

Note: Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety.

SECTION 3 - HAZARDS IDENTIFICATION

Signal word	CAUTION!
Statements of hazard	MAY BE HARMFUL IF SWALLOWED POSSIBLE RISK OF HARM TO THE UNBORN CHILD
Eye effects	Active ingredient is not an irritant
Skin effects	Active ingredient is not a skin irritant
Inhalation effects	An Occupational Exposure Limit has been established for one or more of the ingredients (see Section 8).
Ingestion effects	May be harmful if swallowed (Based on components).
Other potential health effects	Animal studies with doramectin have shown a potential to cause adverse effects on the fetus.

SECTION 3 - HAZARDS IDENTIFICATION ... continued

NOTE: This document has been prepared in accordance with standards for workplace safety, which require the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warnings included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

SECTION 4 - FIRST AID MEASURES

Skin	Remove clothing and wash affected skin with soap and water. If irritation occurs or persists, get medical attention. This material may not be completely removed by conventional laundering. Consult professional laundry service. Do not home launder.
Eyes	Immediately flush eyes with water for at least 15 minutes. Get medical attention.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.
Ingestion	Get medical attention immediately. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

Fire fighting instructions	Wear approved positive pressure, self-contained breathing apparatus and full protective turn out gear. Evacuate area and fight fire from a safe distance.
Extinguishing media	Water, carbon dioxide, dry chemical or foam.
Flash point	No data available
Hazardous combustion products	No data available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

General	Review Sections 3, 8 and 12 before proceeding with clean up.
Small spill	Use non-combustible material to absorb spill; then place in a suitable, labeled recovery container. Clean spill area thoroughly. Prevent discharge to drains.

SECTION 6 - ACCIDENTAL RELEASE MEASURES ... continued

Large spill Contain the source of the spill or leak if it is safe to do so. Use absorbant material to wipe up spill and place in a sealed container for disposal. Close container and move it to a secure holding area. Prevent discharge to drains.

SECTION 7 - HANDLING AND STORAGE

General handling Use only in a well-ventilated area. Avoid contact with eyes. Avoid contact with skin and clothing. Avoid breathing vapor or mist.

Storage conditions Store out of direct sunlight in a cool, well ventilated dry area. Protect from light. Keep container tightly closed when not in use.

Temperature range for storage < 30 °C

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits			
<u>Compound</u>	<u>Issuer</u>	<u>Type</u>	<u>OEL</u>
Doramectin	Pfizer	TWA-8 HR	0.2 mg/m ³
Phenol	OSHA	TWA-8 Hr	5 ppm (19 mg/m ³) [skin]
	NIOSH	TWA-10 Hr	5 ppm (19 mg/m ³) [skin]
	NIOSH	Ceiling	15.6 ppm (60 mg/m ³) [skin]
	NIOSH	IDLH	250 ppm

Measurement method Doramectin: CAM-JWT-93-08 (contact Pfizer for additional details)

Ventilation Engineering controls should be used as the primary means to control exposures. Good general ventilation should be sufficient to control airborne levels. For laboratory use, handle in a lab hood.

Respiratory protection If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.

Eye protection Safety glasses or goggles

Skin protection Use protective clothing (uniforms, lab coats, disposable coveralls, etc.) in both production and laboratory areas.

Hand protection Rubber gloves

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical form Liquid

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ... continued

Color	Amber oil
Molecular weight	Mixture
Molecular formula	Mixture
pH	No data available
Boiling point	No data available
Melting point	Not applicable (N/A)
Density	No data available
Vapor pressure	No data available
Water solubility	Insoluble
Solvent solubility	Freely soluble in most polar organic solvents.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Stable
Conditions to avoid	Direct sunlight, heat, sparks or open flames
Incompatibilities	Strong oxidizers
Hazardous decomposition products	No data available
Hazardous polymerization	Will not occur

SECTION 11 - TOXICOLOGY INFORMATION

Toxicology summary The information included in this section describes the potential hazards of the active ingredient.

Acute toxicity

<u>Compound</u>	<u>Type</u>	<u>Route</u>	<u>Species</u>	<u>Result</u>
Doramectin	LD ₅₀	Oral	Rat (M)	1000-2000 mg/kg
	LD ₅₀	Oral	Rat (F)	500-1000 mg/kg
	LD ₅₀	Oral	Rat(M)	50-100 mg/kg
	LD ₅₀	Oral	Rat (F)	100-200 mg/kg
	Irritation	Ocular	Rabbit	Negative
	Irritation	Dermal	Rabbit	Negative

Eye See Acute toxicity table.

Skin See Acute toxicity table.

SECTION 11 - TOXICOLOGY INFORMATION ... continued

Inhalation	No data available
Ingestion	See Acute toxicity table. When administered to rats in an aqueous suspension, the LD50 ranges were 500-1000 mg/kg for females and 1000-2000 mg/kg for males. When administered in sesame oil the acute toxicity was greater, with LD50 ranges of 50-100 mg/kg for female rats and 100-200 mg/kg for male rats.
Mutagenicity	No evidence of mutagenicity was observed for doramectin when tested in vitro and in vivo in the following assays: the Ames test, the mouse lymphoma assay, and the unscheduled DNA synthesis (UDS) assay.
Subchronic effects	Doramectin was tested in both rats and dogs. In a 3-month rat study, the only treatment related effect noted was an increase in liver weight. In dogs a 1-month study resulted in mydriasis, decreased food consumption and decreased body weight. Animals receiving the high dose (4 mg/kg/day) also exhibited tremors, salivation, ataxia, and emesis. A 3-month study in dogs produced only dose-dependent mydriasis.
Chronic effects/ carcinogenicity	No carcinogenic data available. However, the carcinogenic potential of a structurally related avermectin, abamectin, has been investigated in rodents. No evidence of carcinogenicity was seen in these studies.
Carcinogen status	None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.
Reproductive effects	No reproductive effects were observed in a two-generation oral toxicity study in rats.
Teratogenicity	Embryomortality was seen in mice but not in rats treated with doramectin. Delayed pubic bone ossification was seen in rabbits. Additional fetal anomalies seen in rabbits at higher doses were thought to be due to maternal toxicity.
At increased risk from exposure	This material has been shown in rats to be excreted in milk and, as a result, to cause toxicity in young pups; nursing mothers should exercise caution regarding exposure.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental overview	In the environment, the active ingredient in this formulation is expected to bind tightly to soil or sediment and not readily desorb. It is unlikely to reach groundwater and is also biodegradable by soil microflora. Harmful effects to aquatic organisms could occur.
Bioaccumulation and toxicity:	See aquatic toxicity data, below.

SECTION 12 - ECOLOGICAL INFORMATION ... continued

Aquatic toxicity

<u>Compound</u>	<u>Type</u>	<u>Species</u>	<u>Result</u>
Doramectin	EC50/48h	Daphnia magna	0.1 ppb
	LC50/96h	Bluegill Sunfish	11 ppb
	LC50/96h	Rainbow Trout	5.1 ppb
	MIC/24-48h	Aspergillus niger	600 mg/l
	MIC/24-48h	Clostridium perfringens	40 mg/l
	MIC/14days	Green Algae	<1 mg/l
	MIC/24-72h	Nostoc	60 mg/l

SECTION 13 - DISPOSAL INFORMATION

Disposal procedure Incineration is the recommended method of disposal for this material. Observe all local and national regulations when disposing of this mixture.

SECTION 14 - TRANSPORTATION INFORMATION

General shipping instructions Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.

SECTION 15 - REGULATORY INFORMATION

EU Classification Dangerous for the Environment

EU Labelling None required

Risk phrases R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases S57 - Use appropriate containment to avoid environmental contamination.

Canadian WHMIS Class D, Division 2, Subdivision A

SECTION 16 - OTHER

Disclaimer Pfizer Inc believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without a warranty of any kind, expressed or implied.