

Section 1: Identification

Product Name	IVERMECTIN USP (FOR HUMAN USE)	
Commercial Name	IVERMECTIN USP (FOR HUMAN USE)	
Product Use	Antiparasitic agent; Insecticides	
Restrictions On Use	FOR PRESCRIPTION COMPOUNDING/RX ONLY	
Product Code	30-5152	
Company	PCCA 9901 South Wilcrest Houston, TX 77099 Phone: 1-800-331-2498 Fax: 1-800-874-5760	In case of emergency contact: CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: TOXIC; SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD; FATAL IF SWALLOWED;
CFR 1910.1200 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS

Signal Word DANGER

Hazard Statement(s) H300: Fatal if swallowed. H311: Toxic in contact with skin. H361: Suspected of damaging fertility or the unborn child. H410: Very toxic to aquatic life with long lasting effects.

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention

P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P264: Wash thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P273: Avoid release to the environment. P280: Wear protective glove/ protective clothing. P281: Use personal protective equipment as required. P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. P302+P352: IF ON SKIN: Wash with plenty of soap and water. P308+P313: IF exposed or concerned: Get medical advice/ attention. P312: Call a POISON CENTRE or doctor/ physician if you feel unwell. P321: Specific treatment (see... on this label). P322: Specific measures (see... on this label). P330: Rinse mouth. P361: Remove/ Take off immediately all contaminated clothing. P363: Wash contaminated clothing before reuse. P391: Collect spillage. P405: Store locked up. P501: Dispose of contents/ container in accordance with local/ regional/ national/ international regulations.

Response

N/A

Storage

Technical Measures and Storage Conditions: Store at 15°C to 30°C. Packaging Materials: Sealed in double-layers PE bag, then in aluminum pot.

Disposal

Dispose in accordance with all applicable regulations.

Section 3: Composition/Information on Ingredients

Substance/Mixture	MIXTURE
Components	Ivermectin; Ivermectin H2B1a; Ivermectin H2B1b
% By Weight	>=95.0%
CAS#	70288-86-7
Molecular Weight	Ivermectin H2B1a = 875.09; Ivermectin H2B1b = 861.07
Chemical Formula	MULTIPLE
Synonym(s)	22,23-Dihydroabamectin; Cardomec®; Cevamec®; Equimec®; Eqvalan®; Heartgard-30®; Hyvermectin; Ivermectine; Ivomec®; Ivosint; Jetamec®; Mectizan®; Noramectin®; Oramec®; Pandex®; Phoenectin®; Stromectol®; Uvemecc®; Vermic®; Zimecterin®

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Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Ivermectin	70288-86-7	>=95.0	N/A	6.6 MG/KG
Ivermectin H2B1a	70161-11-4	>=90.0	N/A	N/A
Ivermectin H2B1b	70209-81-3	<=5.0	N/A	N/A

Section 4: First-Aid Measures

Inhalation	Remove to fresh air. If breathing becomes difficult, call a physician.
Skin Contact	Flush with copious amounts of water and soap for at least 15 minutes. Remove contaminated clothing and shoes.
Eye Contact	Assure adequate flushing by separating the eyelids with fingers. Flush with copious amounts of water for at least 15 minutes.
Ingestion	Wash out mouth with water and administer fresh water provided that the person is conscious. Monitor respiration and pulse.
Symptoms/Effects	
Acute	Adverse effects may include joint or muscle pain; nausea; dizziness; fever; headache; tender lymph nodes in neck, armpits, or groin; skin rash; itching; fast heartbeat; and swelling of face or extremities. Possible allergic reaction to material if inhaled, ingested or in contact with skin. Eye, skin, gastrointestinal and/or respiratory tract irritation.
Delayed	Possible hypersensitization.

Immediate Medical Attention

Remove from exposure. Remove contaminated clothing. For treatment advice, seek guidance from an occupational health physician or other licensed health-care provider familiar with workplace chemical exposures. If person is not breathing, give artificial respiration. If breathing is difficult, give oxygen if available. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention.

Section 5: Fire-Fighting Measures**Suitable Extinguishing Media**

Carbon dioxide, dry chemical powder or appropriate foam. Water spray. Avoid spill into drains, surface and groundwater and soil.

Unsuitable Extinguishing Media

N/A

Products of Combustion

CO_x and other noxious gases or vapours in case of incomplete combustion

Firefighters Special Equipment and Precautions

As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing.

Section 6: Accidental Release Measures

For Non-emergency Personnel: Protective Equipment: Wear suitable protective equipment. Emergency Procedures: Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Avoid inhalation of dust from the spilled material. Wear appropriate personal protective equipment. For Emergency Responders: Switch off electrical equipment and any other sources of ignition. Evacuate area. Wear self-contained breathing apparatus, appropriate boots and heavy rubber gloves. Environmental Precautions: Keep away from drains, surface and ground water. Methods and Materials for Containment and Cleaning up For Containment: Collect residues manually, wipe with a small quantity of sodium hypochlorite, place in a bag and hold for waste disposal. For Cleaning up: Avoid raising dust/mist. Ventilate area and wash spill site with sodium hypochlorite solution after material pick up is complete. SEE SECTION 8.

Section 7: Handling and Storage

Precautions for Safe Handling: Measures to Prevent Fire: The product itself does not burn. Measures to Prevent Aerosol and Dust Generation: If technically possible use local exhaust ventilation. Measures to Protect the Environment: No special provisions if the product is used appropriately. Advice on General Occupational Hygiene: NAIF Conditions for Safe Storage, including any Incompatibilities: Technical Measures and Storage Conditions: Store at 15°C to 30°C. Packaging Materials: Sealed in double-layers PE bag, then in aluminum pot. Requirements for Storage Rooms and Vessels: N/A Storage Class: 6.1 B Further Information on Storage Conditions: N/A Specific End Use(s): Recommendations: N/A Industrial Sector Specific Solutions: NAIF

Section 8: Exposure Controls/Personal Protection

Exposure Limits N/A

Engineering Controls

Organisational Measures to Prevent Exposure: Substance/Mixture only to be used by those trained in its safe use. Appropriate Engineering Technologies: Enclosed processes or local exhaust ventilation.

Personal Protection

Individual Protection Measures: Respiratory Protection: Use a NIOSH-approved respirator, if it is determined to be necessary by an industrial hygiene survey involving air monitoring. In the event that a respirator is not required, an approved dust mask should be used. Eye Protection: Wear protective chemical safety goggles. Hand Protection: Compatible chemical-resistant gloves. Protective Clothing: Wear protective suit. Thermal Hazards: Engineering controls such as exhaust ventilation are recommended. Environmental Exposure Controls: Substance/Mixture Related Measures to Prevent Exposure: N/A Instruction Measures to Prevent Exposure: N/A Organisational Measures to Prevent Exposure: N/A

Section 9: Physical and Chemical Properties

Appearance	Crystalline powder. White to yellowish-white.		
Odor	Odorless		
Odor Threshold	N/A		
Melting Point	N/A	pH	N/A
Freezing Point	N/A	Vapor Pressure	N/A
Boiling Point/Range	N/A	Vapor Density	N/A
Decomposition temperature	N/A	Viscosity	N/A
Partition Coefficient: n-octanol/water	N/A	Evaporation Rate	N/A
Flash Point	N/A	Autoignition temperature	N/A
Flammability	N/A	Flammability or Explosive Limits:	
		Lower	N/A
		Upper	N/A
Solubility(ies)	Easily soluble in methanol, ethanol, acetone, ethyl acetate, but insoluble in water.		
Other	N/A		

Section 10: Stability and Reactivity

Reactivity	No reactivity hazards known.
Chemical Stability	Stable under normal use.
Hazardous Polymerization	N/A
Conditions to Avoid	Avoid exposure to light and moisture.
Incompatible Materials	Oxidizing agents, alkali metals, ammonia, peroxides, acids, bases.
Hazardous Decomposition Products	When heated to decomposition, material emits toxic fumes of NOx. Emits toxic fumes under fire conditions.

Section 11: Toxicological Information

RTECS	N/A
Acute Toxicity	
Human LD50 = 6.6 mg/kg	
Skin Corrosion/Irritation	
Rabbits LD50 = 406 mg/kg.	
Serious Eye Damage/Irritation	
Rabbits Slightly irritant.	
Respiratory or Skin Sensitization	
N/A	
Germ Cell Mutagenicity	
Negative, the unscheduled DNA synthesis assay in human fibroblasts.	
Carcinogenicity	
N/A	
Reproductive Toxicity	
Rats po Up to 3? MRHD, no adverse effects on fertility. TDLO = 655 mg/kg. Reproductive - Maternal Effects – parturition; Reproductive - Effects on Newborn - other postnatal measures or effects. (Ivermectin). TDLO = 73 mg/kg. Reproductive - Effects on Newborn - weaning or lactation index (e.g., # alive at weaning per # alive at day 4) (Ivermectin)	
Routes of Entry	
Inhalation, skin/eyes contact, ingestion	

Symptoms Related to Exposure

May cause serious irritation and hypersensitivity

Potential Health Effects

N/A

Target Organ(s)

CNS; Liver; Heart.

Section 12: Ecological Information**Ecotoxicity**

Toxicity: Natural Pollution Sources: Semi-synthesized product form abamectin Acute (Short-term) Toxicity: LC50 (Fish-96h): LC50 = 5.3 µg/L LC50 = 3 µg/L, Trout; LC50 = 4.8 µg/L, Bluegill sunfish EC50 (Daphnies-48h): EC50 = 0.013 µg/L LC50 = 0.025 µg/L, Daphnia magna IC50 (Algae-72h): NAIF Other Organisms: NAIF Chronic (Long-term) Toxicity: Fish: N/A Crustacea: NOEC = 0.0003 ng/L, D. Magna NOEC = 0.001 ng/L, C. dubia NOEC = 30 ng/L, Ceriodaphnia sp. Algae/Aquatic Plant NOEC < 0.001 mg/L, Chlorella pyrenoidosa, 14 day. Other Organisms: N/A

Persistence and Degradability

Persistence and Degradability: Persistence: t1/2 = 180 days in water**, t1/2 = 360 days in soil**, t1/2 = 1600 days in sediment**.

Ivermectin photodegrades rapidly. Degradability: Abiotic Degradation: N/A Physical- and Photo-chemical Elimination: N/A

Biodegradation: Slow biodegradation. BOD5: N/A COD: N/A

Bioaccumulative Potential

Kow: Log Kow = 3.22 BCF: Potential for bioaccumulation

Mobility in Soil

Known or Predicted Distribution to Environmental Compartments: Results Compartment Calculated distribution Air NAIF Water NAIF Soil NAIF Sediment NAIF Surface Tension: NAIF Absorption/Desorption: NAIF Koc: NAIF Leaching and Mobility: Ivermectin is metabolized in the soil. Water solubility is limited and it binds to soil very tightly. It does not bioconcentrate in fish and is not taken up from soil into plants. **NAIF = NO AVAILABLE INFORMATION FOUND**

Other Adverse Effects

Results of PBT and vPvB assessment: PBT: The substance is considered to be a PBT substance. vPvB: The substance is not considered to be a vPvB substance.

Section 13: Disposal Considerations**Waste Disposal**

Product/Packaging Disposal: Product residue: Deliver to the Environmental service of the factory or to any specialized and approved disposal service. Incineration in accordance with laws. Uncleaned packaging: Deliver to the Environmental service of the factory or to any specialized and approved disposal service. Incineration in accordance with laws. Waste Codes/ Waste designations according to Low: Dispose in accordance with all applicable regulations Waste Treatment-Relevant Information: The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Sewage Disposal-Relevant Information: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Disposal of Container

N/A

Other Considerations

N/A

Section 14: Transport Information**DOT Classification**

Hazard Class: Packing Group: Toxic solid, organic, n.o.s. 6.1/9 II

Section 15: Regulatory Information**Regulations**



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30-5152

U.S.: TSCA: Exempt OSHA: None of the chemicals in this product are considered highly hazardous by OSHA. SARA: SARA Section 302 Extremely Hazardous Substance: Not Listed. SARA Section 302/304 Emergency Planning and Notification: None. SARA Section 311/312 Hazard Categories: Acute Health Hazard. SARA Section 313 Toxic Chemicals-Supplier Notification Required: None. EPA: CERCLA: Not listed CAA 112(r): Not listed CWA 311/307: Not listed California: P65: Not listed EU: SVHC: Not listed Authorisations and/or Restrictions on Use: NAIF Authorisations: NAIF Restrictions on Use: NAIF Other EU Regulations: NAIF Information According 1999/13/EC about Limitation of Emissions of Volatile Organic Compounds (VOC-guideline): NAIF Germany: WGK: Group 3 TA-Luft: NAIF Technical Rules for Dangerous Substances: NAIF Canada: DSL/NDSL: Listed on DSL Australia: AICS: Not listed P. R. China: IECSC: Not listed SFDA: Narcotic: Not listed Psychotropic: Not listed **NAIF = NO AVAILABLE INFORMATION FOUND**

Other

N/A

Section 16: Other Information

N/A