SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Prescription Treatment® brand 2% Propoxur Bait
EPA Reg. No.: 499-518
Product Code(s): P02-0396 (4 x 4 lbs)
Distributed by: Whitmore Micro-Gen Research Laboratories, Inc.
3568 Trem Court Industrial Blvd.
St. Louis, MO 63122-6682

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPOSITION INFORMATION

ACTIVE INGREDIENT (2.0%) % CAS NO.
Propoxur NE 0.50 mg/m³ NE 0.50 mg/m³
OTHER INGREDIENTS (98.0%) % CAS NO.

* All ingredients may not be listed. Ingredients not listed do not meet the reporting requirements of the OSHA Hazard Communication Standard (HCS) as specified in 29 CFR 1910.1200.

SECTION 3. HAZARDS IDENTIFICATION

ACUTE EFFECTS OF EXPOSURE: Inhalation, dermal absorption or ingestion of this material may result in systemic intoxication due to inhibition of the enzyme cholinesterase. The sequence of development of systemic effects varies with the route of entry, and the onset of symptoms may be delayed an hour or more. First symptoms of poisoning may be nausea, increased salivation, fascination, blurred vision and constriction pupils. Other symptoms of systemic poisoning include vomiting, diarrhea, abdominal cramping, diarrhea and sweating. At inhalation, respiratory symptoms like tightness of chest, wheezing, and laryngeal spasm, may be pronounced at first. If the poisoning is severe, then symptoms of convulsions, low blood pressure, cardiac irregularities, loss of reflexes and coma may occur. In exposure to dry powder, death may occur due to a combination of factors such as respiratory arrest, paralysis of respiratory muscles or intense bronchoconstrictions. Complete sympathetic recovery from sublethal poisoning usually occurs within 24 hr once the source of exposure is completely removed. Animal studies have shown that this product is mildly toxic by the oral and dermal routes. It can cause mild irritation to the conjunctiva with all irritation resolving within 7 days.

CHRONIC EFFECTS OF EXPOSURE: Repeated exposure to small amounts of this material may result in unexpected cholinesterase depression causing symptoms such as malaise, weakness, and anorexia which resemble other illnesses such as influenza. Exposure to the concentration that would not have produced symptoms in a person that was not previously exposed may produce severe symptoms of cholinesterase inhibition in a previously exposed person. High doses of Propoxur induced bladder cancers when fed to rats in one study. Cancer was not induced in several other feeding studies on rats and other mammals. The implications of these studies for humans are not known.

HAZARDOUS DECOMPOSITION PRODUCTS

Proposed products include: Carbon monoxide, carbon dioxide, CH₃NCO, CH₃NH₂.

SECTION 4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor or going for treatment. Describe any symptoms and follow the advice given.

Eye Contact:
Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contact lenses, if present, after 15 min until signs of atropinization (dry mouth, flushing and dilated pupils if pupils were originally pinpoint). Do not give anything by mouth to an unconscious person.

Skin Contact:
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 min. Remove contact lenses, if present, after 15 min, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

Inhalation:
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.

Eye Contact:
Hold eyes open and rinse slowly and gently with water for 15 - 20 min. Remove contact lenses, if present, after 15 min. Then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

Inhalation:
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.

Note to Physicians: Product contains a cholinesterase inhibitor. If symptoms of cholinesterase inhibition are present, atropine sulfate is anticholinergic and should be administered. Atropine sulfate in large therapeutic doses is anticholinergic, 2-PAM is anticholinergic and should be administered. In severe cases, start treatment by giving 2 - 4 mg intravenously every 5 - 10 min until atropinized. Do not give atropine sulfate alone. Do not use anticholinergics such as 2-PAM unless organophosphate intoxication is also suspected. Do not give morphine. Watch for pulmonary edema which may develop in serious cases of poisoning even after 24 hr. If first sign of pulmonary edema, place patient in oxygen tent and treat symptomatically.

Medical Conditions Aggravated by Exposure: None; specific medical conditions are known which may be aggravated by exposure to the active ingredient in the product; however, any disease, medication or prior exposure which reduces normal cholinesterase activity may increase susceptibility to the toxic effects of the active ingredient.

Emergency Telephone Number of Prosar: 800-225-3320 (for medical emergencies)
Propoxur at liquid aerosol concentrations of 2.2, 10.4 or 50.5 mg/m3 for 6.3 hr/day, 5 days/wk for 2 yr. Cholinesterase weight gain, cholinesterase inhibition, neuropathy and muscular atrophy. The NOEL was 200 ppm. Rats were exposed to concentrations of 200, 1,000 or 5,000 ppm. Treatment with 5,000 ppm resulted in decreased food consumption, decreased body weight gain, increased liver weights and thymus atrophy. An additional study was conducted in which the NOEL was determined to be 2 mg/kg for males and 10 mg/kg for females based on decreased activity in the figure eight maze. All clinical signs and symptoms were related to acute cholinergic toxicity. The NOEL for motor and locomotor activity was 25 mg/kg for both males and females. All clinical signs and symptoms were related to acute cholinergic toxicity. The NOEL for motor and locomotor activity was 25 mg/kg for both males and females. All clinical signs and symptoms were related to acute cholinergic toxicity. The NOEL for motor and locomotor activity was 25 mg/kg for both males and females.

In a group inhalation study, rats were exposed to Propoxur at concentrations of 15.3, 45.3 or 139.6 mg/m3 for 6 hr/day, 5 days/week for a period of either 4 or 8 weeks. Propoxur was administered at dietary concentrations of 60, 600, 1,800 ppm. Effects observed included decreased food consumption and terminal body weights, and changes in clinical chemistry and organ weights. The NOEL was 60 ppm.

In a 1-year feeding study, dogs were administered Propoxur at dietary concentrations of 200, 600, and 1,800 ppm. The high dose was increased to 3,600 ppm during the 41st wk and subsequently to 4,400 ppm from the 45th wk until the end of the study. Effects at the high dose included reduced body weight gain, cholinesterase inhibition, elevated plasma cholesterol levels, increased liver weights and thymus atrophy. An additional study was conducted in which the NOEL was determined to be 10 ppm on the basis of plasma cholesterol. In a 2-year study, Propoxur was administered to rats at dietary concentrations of 200, 1,000, and 5,000 ppm. Treatment with 5,000 ppm resulted in decreased food consumption, decreased body weight gain, cholinesterase inhibition, neuropathy and muscle atrophy. The NOEL was 200 ppm. Rats were exposed to Propoxur at low aerosol concentrations of 2.2, 10.4 or 50.5 mg/m3 for 6.3 hr/day, 5 days/week for 2 yr. Cholinesterase inhibition occurred at concentrations of 10 mg/m3 and above. The NOEL was determined to be 2 mg/m3.

Propoxur was investigated for carcinogenic effects in a 2-year feeding study on mice. Dietary concentrations of 500, 2,000 or 8,000 ppm were employed in the study. An increased incidence of benign liver adenomas occurred in male mice at 2,000 ppm and greater. When rats were fed Propoxur for 2 yr in a single type of diet, urinary bladder neoplasms were observed at concentrations of 1,000 ppm and above. Propoxur was not carcinogenic in other types of diets administered to rats at high doses up to and including the maximum tested concentration of 8,000 ppm. In a 2-yr inhalation study on rats, Propoxur was determined to be nonocarcinogenic at low aerosol concentrations up to and including the maximum tested concentration of 50 mg/m3.

This product contains a chemical known by the state of California to cause cancer.

Mutagenicity
A large mutagenicity database supports the conclusion that Propoxur is not genotoxic. This data base includes a special study to evaluate genotox potential using urinary bladder cancer in rats. This study clearly demonstrated that Propoxur and its metabolites are nongenotoxic to urinary bladder cancer.

Developmental Toxicity
In a developmental toxicity study using rats, Propoxur was administered during gestation by oral gavage at doses of 3, 9, or 27 mg/kg. The NOEL for maternal toxicity was 3 mg/kg. No developmental effects were observed at any of the tested levels. In a developmental toxicity study using rabbits, Propoxur was administered during gestation at oral doses of 3, 10, or 30 mg/kg. Developmental toxicity occurred at the maternal toxicity level of 30 mg/kg. The NOEL for maternal and developmental toxicity was 10 mg/kg.

Reproduction
In reproduction studies using rats, Propoxur was administered at dietary concentrations ranging from 30 to 6,000 ppm. Reproductive effects observed at parentally toxic levels included reductions in the following parameters: gestation rate, mean number of implantation sites, litter size, pup body weights, and survival rate of young. The parental and reproductive NOELs were 30 and 80 ppm respectively.

Neurotoxicity
Propoxur has been investigated for delayed neurotoxicity in acute and subacute studies using rats. Maximum levels tested in the acute studies were 100 and 1,000 mg/kg via intraperitoneal injection and oral gavage, respectively. Dietary concentrations up to and including 4,500 ppm were tested in a 30-day subacute feeding study. There was no indication of Propoxur causing delayed neurotoxicity in any of these studies. An acute neurotoxicity study using rats, Propoxur was administered as a single oral dose at levels of 2.0, 25 mg/kg. The NOEL for motor and locomotor activity was 2 mg/kg for males and 10 mg/kg for females based on decreased activity in the figure eight maze. All clinical signs and neurobehavioral changes were described to acute cholinergic toxicity. The NOEL for neurotoxicity was 25 mg/kg for both sexes. In a 13 wk neurotoxicity study, Propoxur was administered to rats at dietary concentrations of 500, 2,000 or 8,000 ppm. Evidence of toxicity at the mid and high dose included reduced body weight gain and feed consumption, body weight related effects on grip strength, foot-spray and organ weights, and clinical chemical findings (cholinesterase inhibition and liver enzyme induction). Primary neurobehavioral changes were not evident at any dose level. There were no neuroanatomical findings in neural or muscle tissues. Excluding cholinergic responses, the NOEL for neurotoxicity is 8,000 ppm.

Questions concerning the safe handling of the product should be referred to the Whitmire Micro-Gen Customer Service Department at 800-777-8570.

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

SECTION 15. REGULATORY INFORMATION

CERCLA
This product contains the CERCLA listed chemical Propoxur which has a reportable quantity (RQ) of 100 lbs.

OSHA
This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355): No components listed

SECTION 311/312 HAZARDOUS CATEGORIES: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

SECTION 313 TOXIC CHEMICALS: Propoxur (CAS #114-26-1) 2.0% RCRA STATUS
When discarded in its purchased form, this product is a listed RCRA hazardous waste and should be managed as a hazardous waste. (40 CFR 261.20-24) Propoxur is listed as UU11.

CALIFORNIA SAFE DRINKING AND TOXIC ENFORCEMENT ACT
This product contains a chemical known to the state of California to cause cancer.

TSCA
All components of this product are listed or excluded from listing on the US Toxic Substance Control Act (TSCA) Chemical Substance Inventory.