Hacco, Inc.
110 Hopkins Drive
Randolph, WI 53956
(920) 326-2461
(Regulatory Office)
(920) 326-5141
(Manufacturing Location)

In Case of Emergency, Call:
1-800-498-5743 (U.S. Medical Emergency)
1-651-523-0318 (International, Medical Emergency)
1-800-424-9300 (U.S. CHEMTREC)
1-703-527-3887 (International, CHEMTREC)
(collect calls will be accepted on all lines)

1. PRODUCT IDENTIFICATION

Product Name:	**Rodex™ Pelleted Bait-1**	
Signal Word:	**CAUTION**	
Active Ingredient (%):	Warfarin (0.025%)	CAS No.: 81-81-2
Chemical Name:	3(a-acetonylbenzyl)-4-hydroxycoumarin	
Chemical Class:	A coumarin-type anticoagulant rodenticide.	
Registration Number:	61282-33	**Section(s) Revised: Regulatory Review**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Warfarin (0.025%)	0.1 mg/m^3	Not Established	Not Established	No
Flavorings	Not Established	Not Established	Not Established	No

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

3. HAZARDS IDENTIFICATION

Symptoms of Acute Exposure
Slightly irritating to the eyes. The active ingredient is designed to cause bleeding after repeated ingestion.

Hazardous Decomposition Products
None known.

Physical Properties
Appearance: Light blue extruded pellets
Odor: Essentially odorless

Unusual Fire, Explosion, and Reactivity Hazards
None known.

4. FIRST AID MEASURES

Have the product container, label, or Material Safety Data Sheet with you when calling a poison control center or doctor, or going for treatment. **FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL 1-800-498-5743 (U.S. Medical Emergencies) or 1-651-523-0318 (International Medical Emergencies, Collect Calls will be accepted).**

Ingestion: **CALL PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY!** Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice

Skin Contact: If on skin or clothing: Take off contaminated clothing. Wash skin with soap and water.

Inhalation: Not applicable.

Notes to Physician

This product contains an anticoagulant that is warfarin that acts by interfering with the synthesis of prothrombin. The specific measure is the prothrombin time. Note this may not become prolonged until 12-18 hours after ingestion. The specific antidote is Vitamin K_1 (Phytomenandione BP).

Antidote must be administered under medical supervision. Initially, antidote should be given by injection (10-20 mg, or 0.25 mg/kg for children, by slow intravenous infusion at a rate of 1 mg/minute. In severe cases the use of fresh frozen plasma may be required). Maintenance treatment is given orally (40 mg/day in divided doses for adults; up to 20 mg/day in divided doses for children). The prothrombin time and the hemoglobin should be monitored. Patients should be kept under medical supervision until the prothrombin time has been normal for 3 consecutive days. Oral treatment may need to be continued for several months. (20 mg/day in divided doses for adults, and up to 20 mg/day in divided doses for children). (For animal cases the dose is 2-5 mg/kg).

Medical Condition Likely to be Aggravated by Exposure

Bleeding and other conditions which may be aggravated by extended clotting time.

5. FIRE FIGHTING MEASURES

Fire and Explosion

Flash Point (Test Method):	Not Applicable	
Flammable Limits (% in Air):	Lower: % Not Applicable	Upper: % Not Applicable
Autoignition Temperature:	Not Available	
Flammability:	Not Flammable	
Extinguishing Media:	Fog or Water Spray, Foam, Carbon Dioxide, Dry Chemical	

Hazardous Decomposition Products:

None known.

Unusual Fire, Explosion, and Reactivity Hazards

None known.

In Case of Fire

Potentially hazardous in fire. Wear self-contained breathing apparatus. If water is used as an extinguishing media, diking is required to keep contaminate water out of all water supplies.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Control the spill at its source. Clean up spills immediately, observing precautions outlined in Section 8. Sweep up material and place in a compatible disposal container. Once all material is collected, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING, AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact: Eye protection is not required for normal handling. Where eye contact is likely, wear tight-fitting chemical goggles.

Skin Contact: Gloves are not required for normal handling. Where heavy contact is likely, wear chemical resistant (such as nitrile or butyl) gloves.

Inhalation: Respiratory protection is not required for normal handling. In the event of an unusual dust exposure, use engineering controls or a NIOSH-approved particulate respirator (N, P, R, or HE filter) to keep exposure below the Occupational Exposure Limit.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light blue extruded pellets
Odor:	Essentially odorless
Melting Point:	Not Available
Boiling Point:	Not Available
Specific Gravity/Density:	Bulk Density 63 lb/ft^3
pH:	Not Available
Solubility:	Slightly soluble
Vapor Pressure (mmg Hg):	Not Available
Vapor Density:	Not Available

10. STABILTY AND REACTIVITY

Stability:	Stable under normal use and storage conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Avoid excessive heat.
Materials to Avoid:	None known.
Hazardous Decomposition Products:	None known.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

Ingestion:	Practically Non-Toxic		
	Oral (LD_{50} Rat)	: > 20 g/kg	(Baits containing 0.025% Warfarin)
	Oral (LD_{50} Human)	: > 5,000 g/kg	(Baits containing 0.025% Warfarin)
	Oral (LD_{50} Rat)	: 3 to 325 mg/kg	(100% Technical Warfarin)
Dermal:	(LD_{50} Rat)	: >2,000 g/kg	(Baits containing 0.025% Warfarin)
Dermal:	(LD_{50} Rat)	: 1,400 mg/kg	(100% Technical Warfarin)
Inhalation:	(LD_{50} Rat)	: 320 mg/m^3	(100% Technical Warfarin)
Eye Contact:	Not Available		
Skin Contact:	Not Available		
Skin Sensitization:	Not Available		

Other Toxicity Information

Systemically toxic concentrations of this product will probably not be absorbed through human skin.
Because of the formulation of this product, inhalation is not expected to be a normal route of exposure.
No irritation is likely to develop following contact with human eyes.
Irritation will probably not develop following contact with human skin.

Effects of overexposure are those of anticoagulant overdose, i.e., reduced blood clotting ability with spontaneous bleeding in various organs. Body accumulation can result from repeated exposures. Individuals with blood clotting disorders may be more susceptible to overexposure effects.

Toxicity of Other Components

Grains	:	Not Available
Flavorings	:	Not Available

Target Organs

Active Ingredients

Warfarin Technical	:	Blood

Inactive Ingredients

Grains	:	Not Available
Flavoring	:	Not Available

12. ECOLOGICAL INFORMATION

Do not discharge effluent containing this product directly to water. Do not contaminate water when disposing of equipment wash water.

13. DISPOSAL CONSIDERATIONS

Container Disposal

Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. *For containers 1 gallon or less*: Do not reuse empty container (bottle, can, bucket). Wrap container and put in trash.

Pesticide Disposal

Pesticide wastes are acutely hazardous. 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 or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

14. TRANSPORT INFORMATION

DOT Classification

Proper Shipping Name:	Exterminator, Vermin, O/T Poison
Hazard Class:	Not Applicable
UN Number:	Not Applicable
Packing Group:	Not Applicable
Label:	Not Applicable
Special Instructions:	Not Applicable

IMDG Classification

Proper Shipping Name:	Exterminator, Vermin, O/T Poison
Hazard Class:	Not Applicable
UN Number:	Not Applicable
Packing Group:	Not Applicable
Label:	Not Applicable
Special Instructions:	Not Applicable

IATA Classification

Proper Shipping Name:	Exterminator, Vermin, O/T Poison
Hazard Class:	Not Applicable
UN Number:	Not Applicable
Packing Group:	Not Applicable
Label:	Not Applicable
Special Instructions:	Not Applicable

Canadian Classification

Proper Shipping Name:	Exterminator, Vermin, O/T Poison
Hazard Class:	Not Applicable
UN Number:	Not Applicable
Packing Group:	Not Applicable
Label:	Not Applicable

15. REGULATORY INFORMATION

EPA SARA Title III Classification

Section 311/312 Hazard Classes:	Exempt for low concentrations of Hazardous ingredients in mixture.
Section 313 Toxic Chemicals:	Not Applicable

California Proposition 65

This product contains Warfarin, a chemical known to the State of California to cause birth defects or other reproductive harm. This product contains Warfarin, a chemical known in the State of California to cause cancer.

CERLA/SARA 302 Reportable Quantity (RQ)

400,000 pounds of the 0.025% formulation, which contains 100 pounds of Warfarin.

RCRA Hazardous Waste Classification (40 CFR 261)

Not Applicable

TSCA Status

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings	
Health:	1
Flammability:	1
Instability:	0

HMIS Hazard Ratings	
Health:	1
Flammability:	1
Reactivity:	0

0 - Minimal
1 - Slight
2 - Moderate
3 - Serious
4 – Extreme

For Non-Emergency Questions About This Product Call:
1-800-621-8829
Neogen Corporation
Lexington, KY
www.Hacco.com

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