

SAFETY DATA SHEETS

This SDS packet was issued with item:

078915645

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078424955 078915646

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078655040



SAFETY DATA SHEET

122000007039

CO-RAL Emulsifiable Livestock Insecticide

Version 1.2

Revision Date 10/28/2010

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product information**

Product Name: CO-RAL Emulsifiable Livestock Insecticide
MSDS Number: 122000007039

Use : Pesticide

Company

BAYER HEALTHCARE LLC
Animal Health Division
12707 Shawnee Mission Parkway
(West 63rd)
Shawnee, KS 66216-1846
UNITED STATES
(800) 633-3796

In case of emergency: (800) 422-9874
Chemtrec: (800) 424-9300
BAYER INFORMATION PHONE:(800) 633-3796
INTERNATIONAL:(703) 527-3887

2. HAZARDS IDENTIFICATION**Emergency Overview**

DANGER! Toxic, Combustible Liquid Colour: brown **Form:** liquid **Odour:** characteristic. Inhalation, skin absorption, or ingestion may cause inhibition of the enzyme cholinesterase. Inhalation may cause nausea or dizziness. May be fatal if inhaled. Harmful if absorbed through skin. May be fatal if swallowed.

Hazard Communication (29CFR 1910.1200)

Eye Contact Inhalation Skin Absorption Skin Contact

Acute Inhalation Hazards

May cause inhibition of the enzyme cholinesterase with symptoms of runny nose, tearing, tightness of chest, and wheezing. If poisoning is severe, symptoms of fatigue, nausea, vomiting, convulsions, low blood pressure, cardiac irregularities, and coma may occur. In extreme cases death may occur from respiratory failure. The onset of symptoms may be delayed up to 12 hours; however, complete symptomatic recovery of sublethal poisoning usually occurs within one week once the source of exposure is completely removed. Inhalation of glycerine vapors is unlikely due to the low vapor pressure. If

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misted or handled at elevated temperatures, high concentrations can produce irritation and/or difficulty breathing.

Acute Skin Hazards

Skin absorption of the active ingredient in this product may cause inhibition of the enzyme cholinesterase with symptoms of increased sweating, muscle contractions, tearing and constricted pupils. If poisoning is severe, symptoms of fatigue, nausea, vomiting, convulsions, low blood pressure, cardiac irregularities, and coma may occur. In extreme cases death may occur from respiratory failure. The onset of symptoms may be delayed up to 12 hours however, complete symptomatic recovery of sublethal poisoning usually occurs within one week once the source of exposure is completely removed. May cause slight irritation.

Acute Eye Hazards

May cause slight irritation.

Acute Ingestion Hazards

May cause inhibition of the enzyme cholinesterase with symptoms of vomiting, diarrhea, abdominal cramping, dizziness and sweating. If poisoning is severe, symptoms of fatigue, convulsions, low blood pressure, cardiac irregularities, loss of reflexes and coma may occur. In extreme cases death may occur from respiratory failure. The onset of symptoms may be delayed up to 12 hours however, complete symptomatic recovery of sublethal poisoning usually occurs within one week once the source of exposure is completely removed.

Chronic Effects of Exposure

Cholinesterase inhibition sometimes persists for weeks, thus repeated exposure to small amounts of this material may result in unexpected cholinesterase depression. Exposure to this product may produce severe symptoms of cholinesterase inhibition in a previously exposed person. Prolonged contact with this product may cause defatting of the skin due to the solvent component in the product. Chronic exposure to organic solvents has been associated with various neurotoxic effects including permanent brain and nervous system damage.

Medical Conditions Aggravated by Exposure

Eye disorders, Skin disorders, Kidney disorders, Liver disorders

Naphthalene

NTP - Hazard Designation: Anticipated carcinogen.

IARC - Overall evaluation: Possibly carcinogenic to humans.

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3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous Ingredients:**

Weight percent	Components	CAS-No.
10 - 30%	Coumaphos	56-72-4
1 - 5%	Butan-1-ol	71-36-3
10 - 30%	Naphthalene	91-20-3

4. FIRST AID MEASURES

General advice: Take off all contaminated clothing immediately.

If inhaled: Remove to fresh air. Call a physician immediately.

In case of skin contact: After contact with skin, wash immediately with plenty of soap and water. If skin reactions occur, contact a physician.

In case of eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed: If swallowed, seek medical advice immediately and show this container or label.

Note to Physician: If symptoms of organophosphate poisoning are present, the administration of atropine sulfate is indicated. In mild cases, start treatment by giving 1-2 mg of atropine sulfate intravenously every 15 minutes until signs of atropinization appear (dry mouth, flushing, and dilated pupils if pupils were originally pinpoint). In severe cases, start treatment by giving 2-4 mg intravenously every 5-10 minutes until fully atropinized. At first signs of pulmonary edema, place patient in oxygen tent and treat symptomatically. In case of human or animal poisoning, please contact the Poison Control Center at (800)938-3578. Please also notify Bayer at (800)422-9874.

Contact Number: Use the Bayer Emergency Number in Section 1

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: High volume water jet

Specific hazards during fire fighting: Fire may cause evolution of: Hydrogen chloride gas Oxides of phosphorus Sulphur oxides Carbon oxides

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing

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apparatus. Use personal protective equipment.

Further information: Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment.

Methods for cleaning up: Cover spilt product with liquid-binding material (sand, silica gel, acid binder, universal binder, hybilat). Take up mechanically and fill into labelled, closable containers.

Scrub contaminated area with detergent and bleach solution.

Additional advice: Keep away from/remove sources of ignition.

Further Accidental Release Notes Keep away from/remove sources of ignition.

7. HANDLING AND STORAGE**Handling:**

Avoid formation of aerosol. Only handle product with local exhaust ventilation. Avoid contact with skin, eyes and clothing.

Take measures to prevent the build up of electrostatic charge. Keep away from open flames, hot surfaces and sources of ignition.

Storage:

Storage temperature: < 87 °F (< 30.56 °C)

Do not freeze.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Butan-1-ol (71-36-3)**

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 20 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Ceiling Limit Value and Time Period (if specified): 50 ppm, 150 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Skin designation: Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 100 ppm, 300 mg/m3

Naphthalene (91-20-3)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 10 ppm

US. ACGIH Threshold Limit Values

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Short Term Exposure Limit (STEL): 15 ppm

US. ACGIH Threshold Limit Values

Skin designation: Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

Recommended exposure limit (REL): 10 ppm, 50 mg/m³

US. NIOSH: Pocket Guide to Chemical Hazards

Short Term Exposure Limit (STEL): 15 ppm, 75 mg/m³

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 10 ppm, 50 mg/m³

US. ACGIH Threshold Limit Values

Hazard Designation: Not classifiable as a human carcinogen.

Coumaphos (56-72-4)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 0.05 mg/m³ (Inhalable fraction and vapor.)

US. ACGIH Threshold Limit Values

Skin designation: (Inhalable fraction and vapor.) Can be absorbed through the skin.

US. ACGIH Threshold Limit Values

Hazard Designation: Not classifiable as a human carcinogen.

Respiratory protection:

Recommended Filter type: Organic vapor with prefilter

Hand protection:

Chemically resistant gloves.

Eye protection:

Safety glasses

Other protective measures:

Wear suitable protective equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Colour:	brown
Odour:	characteristic
Melting point:	< 10 °F
Density:	1.1 - 1.3 g/cm ³ at 77 °F (25 °C)
Vapour pressure:	no data available
Viscosity, dynamic:	no data available
Miscibility with water:	no data available
Water solubility:	emulsifiable
pH:	no data available
Partition coefficient (n-octanol/water):	no data available
Flash point:	> 185 °F (85 °C)
Ignition temperature:	not determined

ASTM D 1310

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10. STABILITY AND REACTIVITY**Conditions to avoid:** no data available**Materials to avoid:** Oxidizing agents, Bases**Hazardous reactions:** None known.**Thermal decomposition:**

no data available

Hazardous decomposition products:Hydrogen chloride gas, Oxides of phosphorus, Sulphur oxides, Carbon oxides

11. TOXICOLOGICAL INFORMATION**Acute oral toxicity:**

LD50 rat , female : 50 mg/kg

LD50 rat , male : 244 mg/kg

Acute inhalation toxicity:

rat: 795 mg/m3, 4 h

Acute dermal toxicity:

LD50 rabbit: > 3,000 mg/kg

Acute toxicity (other routes of administration):

Coumaphos

LD50 intraperitoneal rat: 7500 µg/kg

Skin irritation:

rabbit

Result: slight irritation

Eye irritation:

rabbit

Result: Slightly irritating

Sensitisation:

Result: Non-sensitizer

Genotoxicity in vitro:

Butan-1-ol

Ames test

Result: negative

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Micronucleus test
Result: negative

Pharmaceutic effects:

Coumaphos
Anthelmintics

12. ECOLOGICAL INFORMATION**General advice:**

Do not allow to enter surface waters or groundwater.

Toxicity to fish:

Coumaphos
LC50 0.18 mg/l
Duration of test: 96 h

LC50 0.34 mg/l
Duration of test: 96 h

LC50 0.89 mg/l
Duration of test: 96 h

LC50 5.3 mg/l
Duration of test: 96 h

LC50 5.9 mg/l
Duration of test: 96 h

Butan-1-ol
Acute Fish toxicity: LC50 1,200 mg/l
Test species: Leuciscus idus (Golden orfe) Duration of test: 48 h

Acute Fish toxicity: LC50 1,730 mg/l
Test species: Pimephales promelas (fathead minnow) Duration of test: 96 h

Toxicity to daphnia and other aquatic invertebrates:

Butan-1-ol
EC50 1,983 mg/l
Test species: Daphnia magna (Water flea) Duration of test: 48 h

Toxicity to algae:

Coumaphos
Cell multiplication inhibition test EbC50 0.2 mg/l
tested on: Desmodesmus subspicatus (Green algae) Duration of test: 72 h

Cell multiplication inhibition test ErC10 0.13 mg/l
tested on: Desmodesmus subspicatus (Green algae) Duration of test: 72 h

Cell multiplication inhibition test ErC50 0.61 mg/l
tested on: Desmodesmus subspicatus (Green algae) Duration of test: 72 h

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Cell multiplication inhibition test EbC10 0.068 mg/l
tested on: Desmodesmus subspicatus (Green algae) Duration of test: 72 h

Cell multiplication inhibition test NOEbC 0.115 mg/l
tested on: Desmodesmus subspicatus (Green algae)

Cell multiplication inhibition test NOErC 0.115 mg/l
tested on: Desmodesmus subspicatus (Green algae)

Biodegradability:

Coumaphos

1 %, 28 d Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

14. TRANSPORT INFORMATION**Land transport (DOT)**

Proper shipping name: Organophosphorus pesticides, liquid, toxic
Hazard Class or Division: 6.1
UN/NA Number: UN3018
Packaging group: II
Hazard Label(s): Toxic

Inland waterway transport

Proper shipping name: Organophosphorus pesticides, liquid, toxic
Hazard Class or Division: 6.1
UN/NA Number: UN3018
Packaging group: II
Hazard Label(s): Toxic

Railway transport

Proper shipping name: Organophosphorus pesticides, liquid, toxic
Hazard Class or Division: 6.1
UN/NA Number: UN3018
Packaging group: II
Hazard Label(s): Toxic

Sea transport (IMDG)

Proper shipping name: ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC
(contains COUMAPHOS)
Hazard Class or Division: 6.1
UN-Number: UN3018
Packaging group: II

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Hazard Label(s): TOXIC
Marine pollutant: Marine pollutant

Air transport (ICAO / IATA cargo aircraft only)

Proper shipping name: Organophosphorus pesticide, liquid, toxic (contains COUMAPHOS)

Hazard Class or Division: 6.1
UN/ID Number: UN3018
Packaging group: II
Hazard Label(s): TOXIC

Air transport (ICAO / IATA passenger and cargo aircraft)

Proper shipping name: Organophosphorus pesticide, liquid, toxic (contains COUMAPHOS)

Hazard Class or Division: 6.1
UN/ID Number: UN3018
Packaging group: II
Hazard Label(s): TOXIC

15. REGULATORY INFORMATION

FIFRA Status This product is registered with the EPA under FIFRA.
US. Toxic Substances Control Act This product is excluded from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)**Components**

Coumaphos

SARA Section 311/312 Hazard Categories Immediate Health Hazard, Delayed Health Hazard, Fire Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required**Components**

Butan-1-ol

Naphthalene

US. EPA CERCLA Hazardous Substances (40 CFR 302)Components

Coumaphos Reportable quantity: 10 lbs
Butan-1-ol Reportable quantity: 5000 lbs
Naphthalene Reportable quantity: 100 lbs

Marine pollutant Components

Coumaphos Severe marine pollutant.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists

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Weight percent	Components	CAS-No.
10 - 30%	Coumaphos	56-72-4
1 - 5%	Butan-1-ol	71-36-3
10 - 30%	Naphthalene	91-20-3

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists

Weight percent	Components	CAS-No.
10 - 30%	Coumaphos	56-72-4
1 - 5%	Butan-1-ol	71-36-3
10 - 30%	Naphthalene	91-20-3

California Prop. 65

Warning! This product contains chemical(s) known to the State of California to be Carcinogenic. - Male reproductive toxin.

Weight percent	Components	CAS-No.
10 - 30%	Naphthalene	91-20-3

<0.001%

OSHA Hazcom Standard Rating Hazardous

16. OTHER INFORMATION**Further information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Y-TEXCORPORATION

Material Safety Data Sheet

PRODUCT NAME:Y-TEX® Co-Ral® Livestock Dust

EPA Reg. No.: 39039-15

SECTION 1 -			
Manufacturer's			
Name	Y-TEX Corporation		
Address	1825 Big Horn Ave., PO Box 1450		For Health Safety Emergency Only
City, State, and ZIP	Cody, WY 82414		800-255-3924 CHEM-TEL, INC.
			Other Information Calls
Date Prepared	7/21/05	Date Revised	1/3/06
			800-443-6401, 307-587-5515 (Y-TEX)

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY			
Hazardous Component(s) (chemical & common name(s))		OSHA PEL	CAS No.
			%(Optional)
ACTIVE INGREDIENTS:			
Coumaphos		NA	56-72-4
0,0-diethyl 0-(3-chloro-4-methyl-2-oxo-2H-1-benzopyran-7-yl) phosphorothioate			1.00%
Inert Ingredients			99.00%
(Contains some nuisance dust particles with a recommended threshold limit value of 10 mg/m3)			

Chemical Family: Organophosphate Insecticide
SARA Title III Hazard Category: Immediate: Y; Delayed: N; Fire: N; Reactive: N; Sudden release of pressure: N
This product contains the following substances which are regulated under SARA, Title III, Sect. 313: NONE

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS				
Boiling Point	Not Applicable	Bulk Density	25-27 lb/cu. ft.	Vapor Pressure (mm. of Mercury)
				Not applicable
Vapor Density (Air=1)	Not Applicable	Percent Volatile (by volume)	Not applicable	Specific Gravity (Water = 1)
				Not applicable
Solubility in Water	Virtually Insoluble	Evaporation Rate (Butyl Acetate = 1)	Not applicable	
Appearance and Odor	Off-white powder with a sulfur-like odor		Melting Point	Not applicable

SECTION 4 - FIRE & EXPLOSION DATA									
Flash Point	Not applicable, Does not flash		Method Used	Flammable Limits in Air % by Volume		LEL Lower	UEL Upper		
	F.	C.	NA			NA	NA		NA
Auto-Ignition Temperature	NA		Extinguisher Media	Considered non-combustible; use medium appropriate to surrounding fire. Dry chemical, CO ₂ , foam, water spray or fog.					
Special Fire Fighting Procedures	Smoke and fumes from fire may contain hazardous components. Use self-contained breathing apparatus and full protective clothing.								
Unusual Fire and Explosion Hazards	Dust may present explosion hazard. If water is used to fight fire or cool containers, contain run-off by diking to prevent contamination of water supplies.								

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)				
Stability	Unstable	<input type="checkbox"/>	Conditions	
	Stable	<input checked="" type="checkbox"/>	to Avoid	Excessive heat.
Incompatability (Materials to Avoid)	Strong oxidizers and alkalis (bases)			
Hazardous Decomposition Products	Chlorine-containing compounds and phosphorus-containing compounds. Incomplete combustion may lead to formation of carbon monoxide and/or other asphyxiants.			
Hazardous Polymerization	May Occur	<input type="checkbox"/>	Conditions	
	Will Not Occur	<input checked="" type="checkbox"/>	to Avoid	None known

SECTION 6 - HEALTH HAZARDS (SIGNAL WORD: CAUTION)									
1. Acute		2. Chronic			Not Determined				
Acute oral LD ₅₀ (rat): 13 mg/kg; Acute dermal LD ₅₀ (rabbit): 500 mg/kg; Acute inhalation LD ₅₀ (rat): 303 mg/kg.									
Signs and Symptoms of Exposure		Dermal and inhalation most likely routes of entry. Product is a cholinesterase inhibitor and can cause depressed ChE activity, headache, blurred vision, non-reactive pin-point pupils, weakness, excessive salivation, sweating, nausea, vomiting, diarrhea, and abdominal cramps. Severe overexposure may lead to muscular fibrillation, pulmonary edema, convulsions, possible cardiac arrest and death.							
Medical Conditions Generally		Persons with depressed cholinesterase levels or hemolytic anemias, or who are under treatment							
Aggravated by Exposure		with morphine, theophylline, aminophylline or phenothiazine drugs may show pronounced effects from exposure to this product. Chronic exposure evaluation should be similar to that of pneumoconiosis.							
Chemical Listed as Carcinogen or Potential Carcinogen		National Toxicology Program		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	I.A.R.C. Monographs		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	OSHA	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Emergency and First Aid Procedures		NOTE TO PHYSICIAN: Coumaphos is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine.							
ROUTES OF ENTRY	>1. Inhalation	Remove victim to fresh air. Apply artificial respiration if indicated. Get medical attention if victim displays signs of poisoning.							
	>2. Eyes	Flush with running water for at least 15 minutes while holding eyelids open to help flush out material. Get medical attention.							
	>3. Skin	Remove all contaminated clothing. Wash skin and hair thoroughly with soap and water. Wash clothing before reuse. If irritation persists, get medical attention.							
	>4. Ingestion	Drink 1 or 2 glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person. Keep head lower than chest to avoid aspiration into lungs. Call physician immediately.							
SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES									
Precautions to be Taken		Store in a cool, dry place away from children, domestic animals, food and feed products, seed and fertilizer.							
in Handling and Storage		Do not contaminate other stored products or the storage area by handling or storage of this product. Immediately clean up any spills which occur during handling and storage.							
Other Precautions		Do not contaminate water supplies by handling or storage of product, cleaning of equipment or disposal of wastes. Keep work and storage areas clean. Toxic to fish and other aquatic organisms. Read and follow precautionary measures on product label.							
Steps to be Taken in Case Material is Released or Spilled		Contain spill; vacuum or scoop and sweep up and place in container for disposal. Decontaminate area by washing with strong household bleach solution and absorb liquids by covering with clay or other absorbent material and dispose of as described above.							
Waste Disposal Methods (Consult federal, state, and local regulations)		Material which cannot be used at the site should be disposed of in an approved waste disposal facility following all applicable Federal, State and Local regulations. Completely empty container into application equipment, then dispose of empty container in a sanitary landfill. If allowed by state and local authorities, empty containers may be burned. If burned, stay out of smoke. Do not contaminate water supplies by disposal of wastes or containers.							
SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES									
Respiratory Protection (Specify Type)		Not normally required. If dusts may exceed acceptable levels, wear MSHA/NIOSH approved respirator or mask for protection against pesticide dusts.							
Ventilation:	Local Exhaust	Recommended for work in confined areas.	Mechanical (General)	Use if ventilation is not adequate	Special	Not normally required	Other	Work in a well-ventilated area	
Protective Gloves		Work gloves or impervious gloves recommended.			Eye Protection		Chemical goggles or shielded safety glasses recommended.		
Other Protective Clothing or Equipment		Wear clothing consistent with good practices for handling and applying pesticides. Wash used clothing before reuse.							
Y-TEX Corporation, 1825 Big Horn Ave., Cody, WY 82414									

SECTION 1: PRODUCT and COMPANY IDENTIFICATION

Product Name: **PYthon® Dust, Livestock Insecticide**
EPA Reg. No. 39039-9

Date Prepared: 12/7/00

Date Revised: 10/22/14

Y-TEX Corporation
1825 Big Horn Ave., PO Box 1450
Cody, WY 82414

For Health Safety Emergency Only, Call CHEM-TEL, Inc.: 1-800-255-3924 (24 hours)
Other Information Calls: 800-443-6401, 307-587-5515 (Y-TEX)
(7:30am – 4:30pm MDT, Monday-Friday)

General Use: For Control of Horn Flies, Lice, Ticks and Keds and to Aid in Control of Face Flies, Stable Flies, and other Nuisance Flies on Lactating and Non-Lactating Dairy Cattle, Beef Cattle, Sheep, Goats and Horses.

SECTION 2: HAZARDS IDENTIFICATION**GHS CLASSIFICATION:**

<u>Health</u>		<u>Environmental</u>	<u>Physical</u>
Acute Toxicity:	Category 4 (Inhalation)	Acute Toxicity:	None Known
Respiratory:	Category 1B		
Skin Irritation:	No	Chronic Toxicity:	
Eye:	No	Category 4	

GHS LABEL:



SIGNAL WORD:

DANGER**HAZARD STATEMENTS:**

Symbols: Respiratory Sensitization, Exclamation - Acute Toxicity, Environmentally hazardous substance

<u>Hazard Statements</u>	<u>Precautionary Statements</u>
DANGER	
H332 Harmful if inhaled	P101 If medical advice is needed, have product container or label at hand.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.	P102 Keep out of reach of children.
	P103 Read label before use.
	P261 Avoid breathing dust or vapors.
	P271 Use only outdoors or in a well-ventilated area.
	P273 Avoid release to the environment.
H413 May cause long lasting harmful effects to aquatic life	P284 In case of inadequate ventilation, can wear NIOSH approved dust respirator.
	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P312 Call a Poison Control Center or doctor if you feel unwell.
	P342+P311 If experiencing respiratory symptoms, call a poison control center or doctor.
	P501 Dispose of contents by completely emptying container. Dispose of on site or at an approved waste disposal facility. Non-refillable container. Do not reuse. Discard in a sanitary landfill or by incineration. If burned, stay out of smoke.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients:	Concentration (w/w)		CAS Number
	%	g/kg	
Zeta-cypermethrin, S-enantiomer (FMC 56701)	0.075%	0.75	52315-07-8
S-Cyano (3-phenoxyphenyl) methyl (±) cis/trans 3-(2,2-dichloroethenyl)-2,2 dimethylcyclopropane-carboxylate*			
*Cis/trans ratio: Max. 55% (±) cis and min. 45% (±) trans			
Piperonyl Butoxide	0.150%	1.5	51-03-6
(butylcarbityl)(6-propylpiperonyl) ether and related compounds			

SECTION 4: FIRST AID

Eye Contact:	Eye contact may cause mild irritation. Avoid eye contact. If contacted, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. If irritation persists, seek medical attention.
Skin Contact:	Wash skin immediately and thoroughly with soap and water for 15-20 minutes after contact. Take off contaminated clothing.
Ingestion:	May be harmful if swallowed. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Inhalation:	No apparent hazard with normal use. Move person to fresh air.
Other Information:	This product contains zetacypermethrin, a pyrethroid insecticide, and piperonyl butoxide, technical, a mixed-function oxidase inhibitor.

SECTION 5: FIRE FIGHTING MEASURES

<u>Flash Point (method):</u>	Not applicable	<u>Autoignition Temperature:</u>	Not applicable	<u>LEL:</u>	Not applicable
<u>UEL:</u>	Not applicable	<u>Flammability Classification:</u>	Not applicable. May burn initially, but will not sustain combustion.		
<u>Extinguishing Media:</u>	CO ₂ foam or dry chemical.				
<u>Hazardous Combustion Products:</u>	Not applicable. This product does not contain any combustible liquids.				
<u>Unusual Fire or Explosion Hazards:</u>	Product contains dust particles that may be explosive if mixed with air in critical proportions and in the presence of a source of ignition. Maintain normal good housekeeping for control of dust. Toxic product vapor concentrations can be produced. At high temperatures, product decomposition can release hydrogen chloride.				
<u>Fire-Fighting Instructions/Equipment:</u>	Wear self contained breathing apparatus and full protective clothing. Runoff must be contained due to fish toxicity.				

SECTION 6: ACCIDENTAL RELEASE MEASURES

Use recommended personal protective equipment (see Section 8).
Small Spill: Wear clean, protective clothing: long-sleeved coveralls or uniforms, rubber gloves, goggles and dust mask. Shovel waste into metal or fiberboard drums. Avoid prolonged or repeated breathing of powder dust. Avoid contact with skin or eyes.
Large Spill: Same as small spill. Keep product out of sewers and water courses. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas.

SECTION 7: HANDLING AND STORAGE

Handling Precautions: Applicators and other handlers must wear: long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof material; and shoes and socks. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or the toilet. Do not contaminate food, feedstuffs or water by cleaning of equipment or disposal of wastes. This pesticide is **extremely** toxic to fish and aquatic invertebrates.
Storage Requirements: Store in cool, dry place. Do not contaminate feed or foodstuffs by storage or disposal.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	U.S. OSHA PEL	ACGIH TLV
Eye/Face Protection:	None required. Can wear tight fitting goggles, safety glasses or other equivalent protective gear.		
Skin Protection:	Applicators and other handlers must wear: long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof material; and shoes and socks.		
Respiratory Protection:	None required. Can wear NIOSH approved dust respirator where dust exposure by inhalation may occur.		
Engineering Controls:	Do not apply with power duster equipment. Do not enter or allow others to enter until dusts have settled.		
Administrative Controls:	Use this product only as specified on the label.		
Other Information:	See Section 7		

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State:	Off-white powder		
Odor:	Odorless	Odor Threshold (ppm):	Not applicable
pH:	Not applicable	Melting Point:	Not applicable
Boiling Point:	Not applicable	Flash Point:	Not applicable
Evaporation Rate:	Not applicable		
Flammability (solid, gas):	Solid, nonflammable		
LEL:	Not applicable	UEL:	Not applicable
Vapor Pressure (mm Hg):	Not applicable	Vapor Density (Air = 1):	Not applicable
Relative Density:	Bulk density 75.5 lb/ft ³	Solubility in Water:	Virtually insoluble
Coefficient of Water/Oil solubility:	Not applicable		
Autoignition temperature:	Not applicable	Decomposition temperature:	Not applicable
V.O.C.:	Not applicable		

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable	Hazardous Polymerization:	Will not occur
Conditions to Avoid:	Do not use or store near heat or open flame	Chemicals to Avoid:	Oxidizing materials
Hazardous Decomposition Products:	Carbon monoxide and/or carbon dioxide. Chlorine & hydrogen chloride may be formed.		

SECTION 11: TOXICOLOGICAL INFORMATIONAcute Effects

Eyes:	Avoid contact. Flush thoroughly with water. If irritation occurs and persists, contact physician.		
Skin:	Acute dermal LD ₅₀ >2000 mg/kg (rabbit, observed). Harmful if absorbed by skin. Avoid contact with skin & clothing. Wash thoroughly with soap and water. Get medical attention if irritation occurs and persists.		
Ingestion:	Acute oral LD ₅₀ >5000 mg/kg (rat, observed). May be harmful if swallowed.		
Inhalation:	Excess inhalation of dust may cause hyperactivity, hypersensitivity and pulmonary problems		

Chronic Effects

Eyes:	Not determined	Skin:	Not determined
Ingestion:	Not determined	Inhalation:	Not determined
Carcinogenicity:	Not applicable		
Target Organ Effects:	Not applicable		
Medical Conditions Aggravated by Long-term Exposure:	None presently known		
Other Information:	Does not flash. May burn initially, but will not sustain combustion.		
Sensitization to Product:	May cause skin sensations (feel numbing and tingling) in certain individuals. Excess inhalation of dust may cause hyperactivity, hypersensitivity and pulmonary problems.		
Irritancy of Product:	Not applicable		

SECTION 12: ECOLOGICAL INFORMATION

This pesticide is **extremely** toxic to aquatic organisms, including fish and invertebrates. Do not contaminate water by cleaning of equipment or disposal of wastes. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area.

SECTION 13: DISPOSAL CONSIDERATIONS

Do not contaminate feed or foodstuffs by storage or disposal. Store in cool, dry place.

Pesticide Disposal:	Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
Container Disposal:	Non-refillable container. Do not reuse or refill this container. Completely empty container into application equipment, then dispose of empty container in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 14: TRANSPORT INFORMATION

UN Number:	None
UN Proper Shipping Name:	See Sections 1 and 3 for product name and chemical names
Transport Hazard Class(es):	Non-hazardous material
Packing group, if applicable:	Not applicable
Marine Pollutant:	No

SECTION 15: REGULATORY INFORMATION

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION

Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.
 Personal Protective Equipment (PPE): Applicators and other handlers must wear: Long-sleeved shirt and long pants; chemical resistant gloves made of any waterproof material; and shoes and socks

SECTION 16: OTHER INFORMATION

Revision date: 10/22/14 USA EPA Reg. No.: 39039-9; USA Establishment No.: 39578-TX-1

The information contained herein is based on data available to us and is accurate and reliable to the best of our knowledge and belief. However, Y-TEX Corporation makes no representations as to its completeness or accuracy. Information is supplied on condition that persons receiving such information will make their own determination as to its suitability for their purposes prior to use. In no event will Y-TEX Corporation be responsible for damages of any nature whatsoever resulting from the use of or reliance upon the information contained herein.

SAFETY DATA SHEET
Co-Ral 1% Livestock Dust

122000009527

Version 4.1

Revision Date 02/05/2015

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product information**

Product Name: Co-Ral 1% Livestock Dust
MSDS Number: 122000009527

Company

BAYER HEALTHCARE LLC
Animal Health Division
12707 Shawnee Mission Parkway
(West 63rd)
Shawnee, KS 66216-1846
USA
(800) 633-3796

In case of emergency: (800) 422-9874
Chemtrec: (800) 424-9300
BAYER INFORMATION PHONE:(800) 633-3796
INTERNATIONAL:(703) 527-3887

2. HAZARDS IDENTIFICATION**Emergency Overview**

Colour: white

GHS Classification:

Acute toxicity (Oral) : Category 4

GHS Label element:

Hazard pictograms :



Signal word : Warning

Hazard statements : H302 Harmful if swallowed.

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.

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P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

Response:

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 Rinse mouth.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification:

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Weight percent	Components	CAS-No.
1%	Coumaphos Technical	56-72-4

Other Ingredients Weight percent	Components	CAS-No.
99%	Calcium carbonate	471-34-1

4. FIRST AID MEASURES

General advice: Take off all contaminated clothing immediately.

If inhaled: Remove to fresh air. If symptoms persist, call a physician.

In case of skin contact: After contact with skin, wash immediately with plenty of soap and water. If skin reactions occur, contact a physician.

In case of eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed: If swallowed, seek medical advice immediately and show this container or label.

Contact Number: Use the Bayer Emergency Number in Section 1

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Any

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Specific hazards during firefighting: Fire may cause evolution of: Carbon monoxide (CO)
Carbon dioxide (CO₂)

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information: Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment.

Methods for cleaning up: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

7. HANDLING AND STORAGE

Handling:

Avoid dust formation. Only handle product with local exhaust ventilation. Avoid contact with skin, eyes and clothing.

No special protective measures against fire required.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Coumaphos Technical (56-72-4)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 0.05 mg/m³ (Inhalable fraction and vapor.)

US. ACGIH Threshold Limit Values

Skin designation: (Inhalable fraction and vapor.) Can be absorbed through the skin.

Calcium carbonate (471-34-1)

US. NIOSH: Pocket Guide to Chemical Hazards

Recommended exposure limit (REL): 10 mg/m³ (Total)

US. NIOSH: Pocket Guide to Chemical Hazards

Recommended exposure limit (REL): 5 mg/m³ (Respirable.)

Respiratory protection:

Recommended Filter type: HEPA

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Hand protection:

Chemically resistant gloves.

Eye protection:

Safety glasses

Other protective measures:

Wear suitable protective equipment.

Please consult label for end-user requirements.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	No applicable information is available
Colour:	white
Odour:	No applicable information is available
Odour Threshold:	No applicable information is available
Melting point:	No applicable information is available
Boiling point/boiling range:	No applicable information is available
Density:	No applicable information is available
Bulk density:	No applicable information is available
Vapour pressure:	No applicable information is available
Viscosity, dynamic:	No applicable information is available
Viscosity, kinematic:	No applicable information is available
Flow time:	No applicable information is available
Surface tension:	No applicable information is available
Miscibility with water:	No applicable information is available
Water solubility:	No applicable information is available
pH:	No applicable information is available
Relative density:	No applicable information is available
Partition coefficient:	No applicable information is available
Solubility(ies):	No applicable information is available
Flash point:	No applicable information is available
Flammability (solid, gas):	No applicable information is available
Ignition temperature:	No applicable information is available
Explosion limits:	No applicable information is available

10. STABILITY AND REACTIVITY

Conditions to avoid: No data available

Materials to avoid: Oxidizing agents

Hazardous reactions: No data available

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Thermal decomposition:

No data available

Hazardous decomposition products:

Carbon monoxide (CO), Carbon dioxide (CO₂)

Oxidizing properties:

No statements available.

Impact sensitivity:

No data available

Further information: The following applies in general to flammable organic substances and preparations: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity:

Acute toxicity estimate (ATE) 1,300 mg/kg

Harmful if swallowed.

Method: Calculation method

Calculated for GHS Classification and Labelling.

Acute inhalation toxicity:

Coumaphos Technical

Rat: 0.34 - 1.08 mg/l, 1 h

Acute dermal toxicity:

Acute toxicity estimate (ATE) > 5,000 mg/kg

The substance or mixture has no acute dermal toxicity

Method: Calculation method

Calculated for GHS Classification and Labelling.

Acute toxicity (other routes of administration):

Coumaphos Technical

LD₅₀ intraperitoneal Rat: 7500 µg/kg

Skin irritation:

Coumaphos Technical

Rabbit

Result: Mild skin irritation

Eye irritation:

Coumaphos Technical

Rabbit

Result: Mild eye irritation

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Sensitisation:

Coumaphos Technical

guinea pig

Result: Does not cause skin sensitisation.

Pharmaceutic effects:

Coumaphos Technical

Antiparasitic agent

Carcinogenicity:

No Carcinogenic substances as defined by IARC, NTP and/or OSHA

STOT - single exposure:

No data available

STOT - repeated exposure:

No data available

12. ECOLOGICAL INFORMATION

General advice:

Do not allow to enter surface waters or groundwater.

Toxicity to fish:

Coumaphos Technical

LC50 0.18 mg/l

Duration of test: 96 h

Toxicity to daphnia and other aquatic invertebrates:

Coumaphos Technical

EC50 0.000192 mg/l

Test species: Daphnia (water flea) Duration of test: 48 h

Toxicity to algae:

Coumaphos Technical

Cell multiplication inhibition test EbC50 0.2 mg/l

tested on: Desmodesmus subspicatus (green algae) Duration of test: 72 h

Cell multiplication inhibition test ErC50 0.61 mg/l

tested on: Desmodesmus subspicatus (green algae) Duration of test: 72 h

Cell multiplication inhibition test NOEbC 0.115 mg/l

tested on: Desmodesmus subspicatus (green algae)

Cell multiplication inhibition test NOErC 0.115 mg/l

tested on: Desmodesmus subspicatus (green algae)

Biodegradability:

Coumaphos Technical

1 %, 28 d Not readily biodegradable.

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13. DISPOSAL CONSIDERATIONS

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

14. TRANSPORT INFORMATION

Please note the classifications shown are for bulk shipments. Limited quantities or other exemptions may apply.

Land transport (CFR)

Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains COUMAPHOS)
Hazard Class or Division:	9
UN/NA Number:	UN3077
Packaging group	III
Hazard Label(s):	Class 9
Marine pollutant:	Marine pollutant

US Sea transport (IMDG)

Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains COUMAPHOS)
Hazard Class or Division:	9
UN number:	UN3077
Packaging group:	III
Hazard Label(s):	MISCELLANEOUS
Marine pollutant:	Marine pollutant

US Air transport (ICAO / IATA cargo aircraft only)

Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains COUMAPHOS)
Hazard Class or Division:	9
UN/ID Number:	UN3077
Packaging group:	III
Hazard Label(s):	MISCELLANEOUS
Marine pollutant:	Marine pollutant

US Air transport (ICAO / IATA passenger and cargo aircraft)

Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains COUMAPHOS)
Hazard Class or Division:	9
UN/ID Number:	UN3077
Packaging group:	III
Hazard Label(s):	MISCELLANEOUS
Marine pollutant:	Marine pollutant

International IATA
IMDG

non-regulated
non-regulated

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15. REGULATORY INFORMATION

Other regulations: No statements available.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

Components

Coumaphos Technical

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

Components

None

US. EPA CERCLA Hazardous Substances (40 CFR 302) Components

Coumaphos Technical

Reportable quantity: 10 lbs

Marine pollutant Components

Coumaphos Technical

Severe marine pollutant.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists

Weight percent

1 - 5%

Components

Coumaphos Technical

CAS-No.

56-72-4

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists

Weight percent

1 - 5%

Components

Coumaphos Technical

CAS-No.

56-72-4

California Prop. 65

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

OSHA Hazcom Standard Rating

Hazardous

16. OTHER INFORMATION

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and

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may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.