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

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 onse of symptoms may be delayed up to 12 hours however, complete symptomat recovery of sublethal poisoning usually occurs within one week once t 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 andnervous system damage.

Medical Conditions Aggrevated 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 10 - 30%	Components Coumaphos	CAS-No. 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 ful 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

Keep away from/remove sources of ignition.

Release Notes

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/cm3 at 77 °F (25 °C)

Vapour pressure:

Viscosity, dynamic:

Miscibility with water:

Water solubility:

pH:

no data available

no data available

emulsifiable

no data available

Partition coefficient

(n-octanol/water): no data available

Flash point: $> 185 \,^{\circ}\text{F} \, (85 \,^{\circ}\text{C})$ ASTM D 1310

Ignition temperature: not determined

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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:

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 US. Toxic Substances Control ActThis product is registered with the EPA under FIFRA.

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 Immediate Health Hazard, Delayed Health Hazard, Fire

Categories 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

CoumaphosReportable quantity: 10 lbsButan-1-olReportable quantity: 5000 lbsNaphthaleneReportable 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 10 - 30%	Components Coumaphos	CAS-No. 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 10 - 30%	Components Coumaphos	CAS-No. 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
10 - 30%Components
NaphthaleneCAS-No.
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-TEX CORPORATION

Hazardous Decomposition Products

May Occur ☐ Conditions

Will Not Occur ■ to Avoid

Hazardous

Polymerization

Material Safety Data Sheet

PRODUCT	NAME:			Ral® Liv	estock	Dust			
CECTION 1		EPA R	eg. No.: 39	039-15					
SECTION 1 Manufacturer's									
Name	Y-TEX Corp	oration							
Address						For Healt	h Safety Emergen	cy Only	
	1825 Big Ho	rn Ave.,	PO Box 1	450		800-25	55-3924 CH	EM-TEL, INC	J
City, State, and ZIP	_						ormation Calls		
	Cody, WY 82					800-44	43-6401, 30°	<u>7-587-5515 (Y</u>	Y-TEX)
Date Prepared	- 10.1 10.7	Date Rev							
	7/21/05		1/3/06						
	- HAZARDO			TS/IDEN'	<u> </u>				
Hazardous Compone	ent(s) (chemical & cor	nmon name	(s))				OSHA PEL	CAS No.	%(Optional)
ACTIVE ING	REDIENTS:								
Couma	aphos						NA	56-72-4	1.00%
	0,0-diethyl 0-(3								
	benzopyran-7-	yl) phosp	horothioate						
Inert I	ngregients								99.00%
	(Contains some	e nuisanc	e dust parti	cles with a	recommer	ıded			
	threshold limit								
	Organophosphate	Insecticide							
	azard Category: Im							e: N	
This product cont	ains the following s	ubstances	which are reg	ulated under S	SARA, Title	e III, Sect. 3	13: NONE		
SECTION 3	- PHYSICAL	& CHI	EMICAI	CHARAC	TFRIC	FICS			
Boiling Point	Not Applicable	a cm	Bulk Density				essure (mm. of Me	rcury) Not applic	able
	TT					- T		,	
Vapor Density (Air-	=1) Not Applica	able	Percent Vola	tile (by volume)	Not ap	pplicable	Specific Grav	ity (Water = 1) No	t applicable
Solubility in Water	Virtually Insolu	ble	Evaporation	Rate (Butyl Ace	etate = 1)	Not app	olicable		
Appearance and Ode	or Off-white pov	wder with	a sulfur-like	e odor		Melting F	Point Not appli	icable	
SECTION 4	- FIRE & EX	PLOSI	ON DATA	\					
	plicable, Does not		Method		Flamma	able Limits	LEL	UE	EL
Point	F. C.		Used N	ΙA	in Air %	6 by Volume	Lowe	er N A Up	per NA
Auto-Ignition Temp	erature NA		Extinguisher	Media Cons	idered nor	n-combusti	ble; use mediu	m appropriate to	surrounding
				fire.	Dry chen	nical, CO ₂ ,	foam, water s	pray or fog.	
Special Fire Fightin	g Procedures	Smoke	and fumes f					Jse self-containe	d breathing
				rotective clo			•		
Unusual Fire and Ex	xplosion Hazards	Dust m	ay present e	xplosion haz	ard. If wa	iter is used	to fight fire or	cool containers	, contain run-
				vent contam			olies.		
SECTION 5	- PHYSICAL	HAZA	RDS (RE	<u>ACTIVI</u> T	Y DATA	A)			
Stability Unstable									
Stable	■ to Avoid		Excessive						
Incompatability (Ma	aterials to Avoid)	Strong	oxidizers an	d alkalis (ba	ses)				

Chlorine-containing compounds and phosphorus-containing compounds. Incomplete combustion

may lead to formation of carbon monoxide and/or other asphyxiants.

None known

SECTION 6 -	- HEALT	H HAZARDS	(SIGNAI	WORD:	CAUTIO	ON)		
1. Acute			2.	Chronic	Not Dete	ermined		
Acute of	ral LD ₅₀ (rat): 13 mg/kg; Acute	dermal LD ₅₀ (r	abbit): 500 m	g/kg; Acu	ute inhalation	LD ₅₀ (rat):	303 mg/kg.
Signs and Symptoms	of Exposure	Dermal and in	halation most li	ikely routes of	entry. Pro	oduct is a cho	olinesterase in	nhibitor and can
cause depressed	ChE activity	, headache, blurred v	ision, non-react	tive pin-point	pupils, we	akness, exces	sive salivatio	on, sweating,
		nd abdominal cramps	. Severe overe	xposure may l	ead to mus	scular fibrilla	tion, pulmon	ary edema,
convulsions, pos			1 1 1 1	. 1 1	1 .	1	1	1
Medical Conditions C	-							under treatment
Aggravated by Expos		. Chronic exposure						pronounced effects
from exposure to	uns produc	. Chronic exposure	evaluation shou	nd be sillilar t	o mai oi p	nieumocomos	015.	
Chemical Listed as C or Potential Carcinog Emergency and		National Toxicolo Program	ogy Yes □ No■	I.A.R.C. Monograj	Yes □ phs No ■		OSHA	Yes □ No ■
	NOTE TO	PHYSICIAN: Coun	naphos is an org	anophosphate	insecticid	le. If sympton	ms of choline	esterase inhibition
	are present,	atropine sulfate by i ion with atropine.						
	\rangle_1 . Inhalation		n to fresh air. A		l respiratio	on if indicated	l. Get medica	al attention if
ROUTES	$\rangle_{2. \text{ Eyes}}$	Flush with rur	ning water for medical attention	at least 15 mir	nutes while	e holding eyel	lids open to h	nelp flush out
OF	3. Skin				kin and ha	ir thoroughly	with coop or	nd water. Wash
OI	/ <u>3. 3KIII</u>		e reuse. If irrita	-			with soap at	id water. wasii
ENTRY	\	•		-	_		ramitina an a	iva anvihina hv
LIVIKI	⟩4. Ingestion	_			_			ive anything by n into lungs. Call
		physician imn		on. Recp nea	u iowei ui	an chest to av	olu aspiratio	ii iiito iuligs. Cali
	-	physician min	icalatery.					
SECTION 7 -	- SPECIA	L PRECAUTIO	NS AND SP	ILL/LEAK	PROCI	EDURES		
Precautions to be Tak		ore in a cool, dry pla					eed products,	seed and
fertilizer.								
in Handling and Stora		o not contaminate other nediately clean up a					storage of th	is product.
Other	Do not con	taminate water suppl	ies by handling	or storage of i	nroduct el	leaning of equ	inment or di	snosal of wastes
Precautions		and storage areas cle						
110000000000000000000000000000000000000		n product label.	10.110 10 11	<u> </u>	quarro org.	<u> </u>	- WII - 10110 11	
Steps to be Taken in		ontain spill; vacuum						
Material is Released		shing with strong ho	usehold bleach	solution and a	absorb liqu	aids by coveri	ing with clay	or other absorbent
material and disp	ose of as de	scribed above.						
Waste Disposal	Material wl	nich cannot be used a	t the site should	d be disposed of	of in an an	proved waste	disposal fac	ility following all
Methods (Consult fee								empty container
		nen dispose of empty						
		burned, stay out of s						
		L PROTECTIO						
Respiratory Protectio	n No	ot normally required.	If dusts may e	xceed acceptal				roved respirator or
(Specify Type)		ask for protection aga	-		t.1 NT.	ot .	N/0x1-	in a wall
Ventilation: Local	Recomme		nanical Use if ve		pecial No		Other Work	in a well-
Exhaus	St WOFK III C	onfined areas. (Gen	eral) is not ad	equate	normany	required		ventilated area
Protective Gloves	Work glove	es or impervious mmended.		Eye Prote		Chemical gog		ded safety
Other Protective		ear clothing consiste	nt with good pr	actices for han				h used clothing

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

before reuse.

Clothing or Equipment

0.75

52315-07-8

SECTION 1: PRODUCT and COMPANY IDENTIFICATION

Product Name: PYthon® Dust, Livestock Insecticide Date Prepared: 12/7/00

EPA Reg. No. 39039-9 Date Revised: 7/26/16

Y-TEX Corporation
For Health Safety Emergency Only, Call CHEM-TEL, Inc. (24 hours): 1-800-255-3924 US
813-248-0585 International
Cody, WY 82414
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:

 Health
 Environmental
 Physical

 Acute Toxicity:
 Category 4 (Inhalation)
 Acute Toxicity:
 Extremely toxic to aquatic organisms, including
 None Known

Respiratory: Category 1B fish and invertebrates

Skin Irritation: No Skin Sensitization: No Chronic Toxicity: Category 4

GHS LABEL:

No

(1) (<u>1</u>)

SIGNAL WORD:

DANGER

HAZARD STATEMENTS:

Eye:

Symbols	s: Respiratory Sensitization	piratory Sensitization, Exclamation - Acute Toxicity, Environmentally hazardous substance				
<u>H</u>	lazard Statements	Precautionary Statements				
DANGE	R	P101 If medical advice is needed, have product container or label at hand.				
H332	Harmful if inhaled	P102	Keep out of reach of children.			
H334	May cause allergy or	P103	Read label before use.			
	asthma symptoms or P261 Avoid breathing dust or vapors.					
	breathing difficulties if	eathing difficulties if P271 Use only outdoors or in a well-ventilated area.				
	inhaled.	P273	Avoid release to the environment.			
H413	May cause long lasting	P284	In case of inadequate ventilation, can wear NIOSH approved dust respirator.			
	harmful effects to	P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.			
	aquatic life 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

Concentration (w/w) CAS Number

<u>% g/kg</u>

Hazardous Ingredients:

Zeta-cypermethrin, S-enantiomer (FMC 56701) 0.075% 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

Flash Point (method): 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.

Extinguishing Media: CO₂ 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.

Fire-Fighting Instructions/Equipment: 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).

<u>Small Spill</u>: 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.

<u>Large Spill</u>: 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

<u>Handling Precautions</u>: 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:OdorlessOdor Threshold (ppm):Not applicablepH:Not applicableMelting Point:Not applicableBoiling Point:Not applicableFlash Point:Not applicable

Evaporation Rate: Not applicable Flammability (solid, gas): Solid, nonflammable

LEL:Not applicableUEL:Not applicableVapor Pressure (mm Hg):Not applicableVapor Density (Air = 1):Not applicableRelative Density:Bulk density 75.5 lb/ft³Solubility in Water:Virtually insoluble

Coefficient of Water/Oil solubility: Not applicable

Autoignition temperature: Not applicable Decomposition temperature: Not applicable V.O.C.: Decomposition temperature: 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 INFORMATION

Acute Effects

Eyes: Avoid contact. Flush thoroughly with water. If irritation occurs and persists, contact physician.

Skin: Acute dermal LD₅₀>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 LD₅₀>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

U.S. DOT: Not regulated for transport Not regulated for transport

VESSEL (IMO/IMDG): UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zetacypermethrin mixture), Class 9, PG III,

Limited Quantity, Marine Pollutant

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: 7/26/16 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.



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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information

Product Name: Co-Ral 1% Livestock Dust

MSDS Number: 122000009527

Company

BAYÉR 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 percentComponentsCAS-No.1%Coumaphos Technical56-72-4

Other Ingredients

Weight percentComponentsCAS-No.99%Calcium carbonate471-34-1

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 No applicable information is available Bulk density: 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

Nabbit

Result: Mild skin irritation

Eye irritation:

Coumaphos Technical

Rabbit

Result: Mild eye irritation

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Sensitisation:

Coumaphos Technical quinea 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: UN

JN/ID Number: UN3077

Packaging group:

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

International IATA 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 Components CAS-No. 1 - 5% Coumaphos Technical 56-72-4

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

Substances Lists

Weight percentComponentsCAS-No.1 - 5%Coumaphos Technical56-72-4

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.