

**SAFETY DATA SHEET**  
**CO-RAL FLY & TICK SPRAY**

122000007053

Version 1.1

Revision Date 10/28/2010

---

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

**Product Name:** CO-RAL FLY & TICK SPRAY  
**MSDS Number:** 122000007053

**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**

**ATTENTION! Toxic, Combustible Liquid Colour:** brown **Form:** liquid **Odour:** solvent.  
Inhalation, skin absorption, or ingestion may cause inhibition of the enzyme cholinesterase. May cause eye, skin, and respiratory tract irritation. Inhalation may cause nausea or dizziness.

---

**Hazard Communication (29CFR 1910.1200)**

Inhalation Skin Contact Skin Absorption Eye Contact

**Acute Inhalation Hazards**

May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose. 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 the

solvents may cause central nervous system depression with symptoms of nausea, lightheadedness, drowsiness, and dizziness.

**Acute Skin Hazards**

May cause irritation with symptoms of reddening and itching. 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. Not expected to be a skin sensitizer.

**Acute Eye Hazards**

May cause irritation with symptoms of reddening, tearing and stinging.

**Acute Ingestion Hazards**

Toxic by ingestion

**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, Respiratory tract disorders

Naphthalene

**NTP** - Hazard Designation: Anticipated carcinogen.

**IARC** - Overall evaluation: Possibly carcinogenic to humans.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Hazardous Ingredients:**

Weight percent	Components	CAS-No.
5 - 10%	Coumaphos	56-72-4
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.

**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: Sulphur oxides Oxides of phosphorus Chlorine gas Hydrogen chloride gas Carbon oxides

**Special protective equipment for fire-fighters:** 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:** Cover spilt product with liquid-binding material (sand, silica gel, acid binder, universal binder, hybilat). Take up mechanically and fill into labelled, closable containers.

**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: < 95 °F (< 35 °C)

Do not freeze.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Naphthalene (91-20-3)

- US. ACGIH Threshold Limit Values  
Time Weighted Average (TWA): 10 ppm
- US. ACGIH Threshold Limit Values  
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/m<sup>3</sup>
- US. NIOSH: Pocket Guide to Chemical Hazards  
Short Term Exposure Limit (STEL): 15 ppm, 75 mg/m<sup>3</sup>
- US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)  
PEL: 10 ppm, 50 mg/m<sup>3</sup>
- 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/m<sup>3</sup> (Inhalable fraction and vapor.)
- US. ACGIH Threshold Limit Values  
Skin designation: (Inhalable fraction and vapor.)Can be absorbed through the skin.

SAFETY DATA SHEET  
**CO-RAL FLY & TICK SPRAY**

122000007053

Version 1.1

Revision Date 10/28/2010

---

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:	solvent
Melting point:	-12 °C
Density:	1.02 g/cm <sup>3</sup> at 68 °F (20 °C)
Vapour pressure:	no data available
Viscosity, dynamic:	no data available
Miscibility with water:	emulsifiable
pH:	no data available
Partition coefficient (n-octanol/water):	no data available
Ignition temperature:	not determined

---

## 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:**  
Sulphur oxides, Oxides of phosphorus, Chlorine gas, Hydrogen chloride gas, Carbon oxides

---

## 11. TOXICOLOGICAL INFORMATION

**Acute oral toxicity:**

LD50 rat : 395 mg/kg

**Acute inhalation toxicity:**

rat: > 1.09 mg/l

**Acute dermal toxicity:**

LD50 rabbit: > 3,000 mg/kg

**Acute toxicity (other routes of administration):**

Coumaphos

LD50 intraperitoneal rat: 7500 µg/kg

**Skin irritation:**

Result: Mild skin irritation

**Eye irritation:**

Result: Mild eye irritation

**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

**Toxicity to algae:**

Coumaphos

Cell multiplication inhibition test EbC50 0.2 mg/l

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

SAFETY DATA SHEET  
**CO-RAL FLY & TICK SPRAY**

122000007053

Version 1.1

Revision Date 10/28/2010

---

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

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:** III  
**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:** III  
**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:** III  
**Hazard Label(s):** Toxic

**SAFETY DATA SHEET**  
**CO-RAL FLY & TICK SPRAY**

122000007053

Version 1.1

Revision Date 10/28/2010

---

**Sea transport (IMDG)**

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

Naphthalene

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

Coumaphos Reportable quantity: 10 lbs  
Naphthalene Reportable quantity: 100 lbs



**SAFETY DATA SHEET**  
**CO-RAL FLY & TICK SPRAY**

122000007053

Version 1.1

Revision Date 10/28/2010

---

**Marine pollutant Components**

Coumaphos Severe marine pollutant.

**Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists**

<b>Weight percent</b>	<b>Components</b>	<b>CAS-No.</b>
5 - 10%	Coumaphos	56-72-4
10 - 30%	Naphthalene	91-20-3

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

<b>Weight percent</b>	<b>Components</b>	<b>CAS-No.</b>
5 - 10%	Coumaphos	56-72-4
0.1 - 1%	Tradesecret	
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.**

<b>Weight percent</b>	<b>Components</b>	<b>CAS-No.</b>
<0.001%		
10 - 30%	Naphthalene	91-20-3

**OSHA Hazcom Standard Rating** Hazardous

---

**16. OTHER INFORMATION**

**NFPA 704M Rating**

<b>Health</b>	3
<b>Flammability</b>	2
<b>Reactivity</b>	0
<b>Other</b>	0

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

**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.