

COUMAPHOS

Coumaphos is a [selective organophosphate insecticide](#) used to control a wide variety of insects that affect livestock, including cattle grubs, screw-worms, lice, scabies, flies, and ticks. It is not used on agricultural or residential plants.

Just the facts

Physical Information

Name: Coumaphos

Use: [insecticide](#)

Source: synthetic chemistry, not naturally occurring

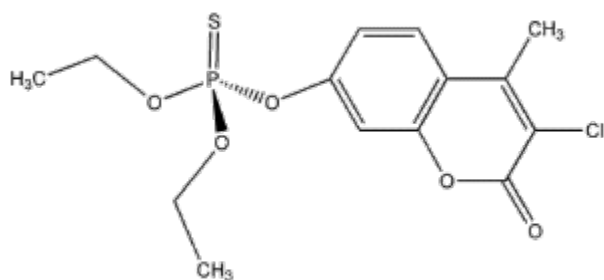
Recommended daily intake:

Absorption: inhalation, absorption, ingestion

Sensitive individuals: workers

Toxicity/symptoms: highly toxic

Chemical Structure



Chemical Description

Coumaphos are odorless colorless crystals at room temperature which decomposes on heating producing toxic fumes including sulfur oxides, phosphorus oxides and hydrogen chloride. It also reacts slowly with bases to be hydrolyzed ([#INCHEM](#)).

Uses

Coumaphos is used to treat pests that interfere with livestock including fleas, ticks, scabies, cattle-grubs and many more. It is not used agriculturally or residentially.

Health Effects

Coumaphos is an [organophosphate insecticide](#) which means it is a [Cholinesterase Inhibitor](#) and is highly toxic if ingested or inhaled and moderately toxic if absorbed dermally. A good summary of the acute health effects and symptoms is from [#EXTOXNET](#):

"When inhaled, the first effects are usually respiratory and may include bloody or runny nose, coughing, chest discomfort, difficult or short breath, and wheezing due to constriction or excess fluid in the bronchial tubes. Skin contact with [Organophosphates](#) may cause localized sweating and involuntary muscle contractions. Eye contact will cause pain, bleeding, tears, pupil constriction, and blurred vision. Following exposure by any route, other systemic effects may begin within a few minutes or be delayed for up to 12 hours. These may include pallor, nausea, vomiting, diarrhea, abdominal cramps, headache, dizziness, eye pain, blurred vision, constriction or dilation of the eye pupils, tears, salivation, sweating, and

confusion. Severe poisoning will affect the central nervous system, producing incoordination, slurred speech, loss of reflexes, weakness, fatigue, involuntary muscle contractions, twitching, tremors of the tongue or eyelids, and eventually paralysis of the body extremities and the respiratory muscles. In severe cases there may also be involuntary defecation or urination, psychosis, irregular heart beats, unconsciousness, convulsions and coma. Death may be caused by respiratory failure or cardiac arrest."

Workers exposed to coumaphos for an extended period of time have reported impaired memory and concentration, disorientation, severe depressions, irritability, confusion, headache, speech difficulties, delayed reaction times, nightmares, sleepwalking and drowsiness or insomnia

It is not believed to be a **Carcinogens** though it may negatively effect human reproductive systems.

Environmental Effects

Coumaphos is highly toxic to birds, aquatic organisms, and a moderate hazard to other beneficial species such as bees.

Not enough research has been done to determine exactly the effect of coumaphos on the environment, but it is clear that it binds strongly to soil and is unlikely to contaminate groundwater

Source : <http://www.toxipedia.org/display/toxipedia/Coumaphos>