**Coumaphos**

**Item No. 24230**

**CAS Registry No.:** 56-72-4  
**Formal Name:** O-(3-chloro-4-methyl-2-oxo-2H-1-benzopyran-7-yl), phosphorothioic acid, O,O-diethyl ester  
**Synonym:** NSC 8944  
**MF:** C_{14}H_{16}ClO_{5}PS  
**FW:** 362.8  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years

*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

**Laboratory Procedures**

Coumaphos is supplied as a solid. A stock solution may be made by dissolving the coumaphos in the solvent of choice, which should be purged with an inert gas. Coumaphos is slightly soluble in methanol and DMSO.

**Description**

Coumaphos is an organophosphate pesticide.\(^1\) It is converted into an oxon-containing metabolite in vivo, similar to other organophosphate pesticides, that inhibits acetylcholinesterase. It is active against adult, but not arrested stage, O. ostertagi helminths.\(^2\) Coumaphos is toxic to A. stephensi and A. aegypti mosquitoes when applied topically, with median lethal doses of 0.002 and 0.012 µg per female mosquito, respectively, but not when used as a contact insecticide.\(^3\) It is lethal to rats (LD\(_{50}\) = 41 and 16 mg/kg for male and female rats, respectively).\(^4\) Formulations containing coumaphos have been used to control pests in livestock.

**References**