

FORMULATION:			IA	IB	T	FW	EC	R		
% a.i.	SC #	CHEMICAL NAME	Validator:				Date:			
95%		CYTOX 2160 Dodine	Larry Turner				4/15/78			
			Test Type:							
			Avian acute oral LD ₅₀				50			
			Bobwhite quail							
			Test ID. # ES-C1							

CITATION: Howard, D.J. and C.D. Johnston, 1971. CYTOX 2160-Safety Evaluation by Single Oral Administration to Bobwhite quail. 13 p. Study conducted by Woodard Research Corporation. Submitted by American Cyanamid Co., Acc # 130888, 10/19/71. Referenced for reg. # 1730-UG, 11/28/77.

RESULTS: Bobwhite quail acute oral LD₅₀ = 690 mg/kg (95% c.i. 511-932 mg/kg). At lowest level of 180 mg/kg, no mortality occurred; 100% mortality occurred at highest level of 3200 mg/kg. The only signs of toxicity were depression and ruffled feathers. Food consumption and weight gain was somewhat reduced, compared to controls, for the first week after dosing, then improved thereafter.

VALIDATION CATEGORY: Core

CATEGORY RATIONALE: Although a finney probit analysis yielded an unacceptable chisquare of 10.02 (4 d.f.), a very close scrutiny of the litchfield-wilcoxon graph that was included showed a chisquare value of 8.04, and when plotted again, this reviewer obtained a value of 7.9, both of which are acceptable.

ABSTRACT: Bobwhite quail were given single oral doses by intubation of CYTOX 2160 of 0(control), 180, 320, 560, 1000, 1800, and 3200 ppm. Procedures followed proposed guidelines except as noted:

1. Age was not specified beyond "young adults".
2. Twenty birds were tested at the four intermediate doses, but only 10 birds were tested at lowest and highest doses.
3. Housing conditions were incompletely reported. Statistical analysis followed Litchfield and Wilcoxon (1949). When checked by Finney probit, a similar LC₅₀ of 684 mg/kg was obtained, but with a chisquare of 10.02. When rechecked by Litchfield-Wilcoxon, an LC₅₀ value of 690 mg/kg was obtained with an acceptable chisquare of 7.90 for 4 degrees of freedom.



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Cytox 2160
 Bobwhite oral LD50
 Finney probit
 4/14/78
 L. Turner

Cytox 2160 Finney probit
 Mallard oral LD90
 4/14/78
 L. Turner

180.
 1.
 20.
 320.
 1.
 20.
 560.
 1.
 20.
 1000.
 18.
 20.
 1800.
 16.
 20.
 3200.
 10.
 10.
 3,488
 -4,891
 1,935
 10,020
 684,656
 556,354
 842,547
 293,744
 206,954
 416,933
 1595,789
 1135,584
 2242,487

M
 YINT
 LW M
 CHI2
 LD50
 LDCL
 UPCL
 LD10
 LDCL
 UPCL
 LD90
 LDCL
 UPCL



560.
 1.
 10.
 1000.
 1.
 20.
 1800.
 1.
 20.
 3200.
 15.
 20.
 5600.
 17.
 20.
 10000.
 10.
 2,358
 -2,797
 2,655
 1,085
 2023,312
 1536,073
 2665,103
 578,695
 330,009
 1014,784
 7074,183
 4273,466
 11710,415

M
 YINT
 LW M
 CHI2
 LD50
 LDCL
 UPCL
 LD10
 LDCL
 UPCL
 LD90
 LDCL
 UPCL

