

APPENDIX B2

**COMPARISON OF PERFORMANCE CHARACTERISTICS OF FOUR
IN VITRO TEST METHODS FOR IDENTIFICATION OF EPA
OCULAR CORROSIVES OR SEVERE IRRITANTS**

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Statistic	IRE (n = 107)¹	ICE (n = 145)	HET-CAM (n = 98)²	HET-CAM (n = 133)³	BCOP (n = 143)
Accuracy	64% (68/107) ⁴	84% (122/145)	65% (64/98)	52% (69/133)	79% (113/143)
Sensitivity	69% (31/45)	52% (15/29)	68% (21/31)	89% (25/28)	75% (30/40)
Specificity	60% (37/62)	92% (107/116)	64% (43/67)	42% (44/105)	81% (83/103)
Positive Predictivity	55% (31/56)	63% (13/24)	47% (21/45)	29% (25/86)	60% (30/50)
Negative Predictivity	73% (37/51)	89% (107/121)	81% (43/53)	94% (44/47)	89% (83/93)
False Positive Rate	40% (25/62)	8% (9/116)	36% (24/67)	58% (61/105)	19% (20/103)
False Negative Rate	31% (14/45)	48% (14/29)	32% (10/31)	11% (3/28)	25% (10/40)

Abbreviations: BCOP = Bovine Corneal Opacity and Permeability assay; GHS = Globally Harmonized System; HET-CAM = Hen’s Egg Test – Chorioallantoic Membrane assay; ICE = Isolated Chicken Eye assay; IRE = Isolated Rabbit Eye assay.

¹n = number of substances tested; the numbers in parentheses in each row indicates the data on which the percentage calculation is based.

²These data are for the IS(B) method (described by Kalweit et al. 1987) when testing substances as a 10% solution *in vitro*.

³These data are for the IS(B) method (described by Kalweit et al. 1987) when testing substances at a 100% concentration *in vitro*.

⁴These results are for the Pooled Data Set.