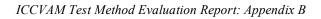
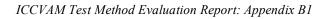
# COMPARISON OF PERFORMANCE CHARACTERISTICS OF FOUR IN VITRO TEST METHODS FOR THE IDENTIFICATION OF OCULAR CORROSIVES OR SEVERE IRRITANTS

<b>B</b> 1	Comparison of Performance Characteristics of Four <i>In Vitro</i> Test Methods for				
	Identification of GHS Ocular Corrosives or Severe IrritantsB-3				
<b>B2</b>	Comparison of Performance Characteristics of Four In Vitro Test Methods for				
	Identification of EPA Ocular Corrosives or Severe Irritants				
В3	Comparison of Performance Characteristics of Four In Vitro Test Methods for				
	Identification of EU Ocular Corrosives or Severe Irritants				



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



Statistic	$IRE (n = 107)^1$	ICE	$ \begin{array}{c} \text{HET-CAM} \\ (n-101)^2 \end{array} $	HET-CAM	BCOP
	,	(n = 144)	$(n = 101)^2$	$(n = 138)^3$	(n = 147)
А оонио от	65%	83%	68%	54%	81%
Accuracy	$(70/107)^4$	(120/144)	(69/101)	(75/138)	(119/147)
Consitivity	70%	50%	70%	87%	84%
Sensitivity	(33/47)	(15/30)	(28/40)	(34/39)	(36/43)
Cracificity	62%	92%	67%	41%	80%
Specificity	(37/60)	(105/114)	(41/61)	(41/99)	(83/104)
Positive	59%	63%	58%	37%	63%
Predictivity	(33/56)	(15/24)	(28/48)	(34/92)	(36/57)
Negative	73%	88%	77%	89%	92%
Predictivity	(37/51)	(105/120)	(41/53)	(41/46)	(83/90)
<b>False Positive</b>	38%	8%	33%	59%	20%
Rate	(23/60)	(9/114)	(20/61)	(58/99)	(21/104)
False Negative	30%	50%	30%	13%	16%
Rate	(14/47)	(15/30)	(12/40)	(5/39)	(7/43)

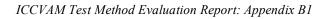
Abbreviations: BCOP = Bovine Corneal Opacity and Permeability assay; GHS = Globally Harmonized System; HET-CAM = Hen's Egg Test - Chorioallantoic Membrane assay; ICE = Isolated Chicken Eye assay; IRE = Isolated Rabbit Eye assay.

<sup>&</sup>lt;sup>1</sup>n = number of substances tested; the numbers in parentheses in each row indicates the data on which the percentage calculation is based. <sup>2</sup>These data are for the IS(B) method (described by Kalweit et al. 1987) when testing substances as a 10%

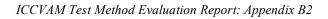
solution in vitro.

<sup>&</sup>lt;sup>3</sup>These data are for the IS(B) method (described by Kalweit et al. 1987) when testing substances at a 100% concentration in vitro.

<sup>&</sup>lt;sup>4</sup>These results are for the Pooled Data Set.



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



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

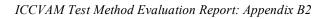
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<sup>&</sup>lt;sup>1</sup>n = number of substances tested; the numbers in parentheses in each row indicates the data on which the percentage calculation is based. <sup>2</sup>These data are for the IS(B) method (described by Kalweit et al. 1987) when testing substances as a 10%

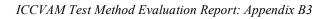
solution in vitro.

<sup>&</sup>lt;sup>3</sup>These data are for the IS(B) method (described by Kalweit et al. 1987) when testing substances at a 100% concentration in vitro.

<sup>&</sup>lt;sup>4</sup>These results are for the Pooled Data Set.



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



Statistic	IRE	ICE	HET-CAM	HET-CAM	ВСОР
Statistic	$(n = 114)^1$	(n = 154)	$(n=95)^2$	$(n = 164)^3$	(n = 143)
Aggurgay	69%	87%	67%	57%	80%
Accuracy	$(79/114)^4$	(134/154)	(64/95)	(94/164)	(114/143)
Sensitivity	76%	59%	70%	93%	82%
Sensitivity	(37/49)	(19/32)	(23/31)	(31/33)	(33/40)
Specificity	65%	94%	66%	48%	79%
Specificity	(42/65)	(115/122)	(41/62)	(63/131)	(81/103)
Positive	62%	73%	52%	31%	60%
Predictivity	(37/60)	(19/26)	(23/44)	(31/99)	(33/55)
Negative	78%	90%	80%	97%	92%
Predictivity	(42/54)	(115/128)	(41/51)	(63/65)	(81/88)
<b>False Positive</b>	35%	6%	34%	52%	21%
Rate	(23/65)	(7/122)	(21/62)	(68/131)	(22/103)
False Negative	24%	41%	30%	6%	18%
Rate	(12/49)	(13/32)	(10/33)	(2/33)	(7/40)

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.

<sup>&</sup>lt;sup>1</sup>n = number of substances tested; the numbers in parentheses in each row indicates the data on which the percentage calculation is based. <sup>2</sup>These data are for the IS(B) method (described by Kalweit et al. 1987) when testing substances as a 10%

solution in vitro.

<sup>&</sup>lt;sup>3</sup>These data are for the IS(B) method (described by Kalweit et al. 1987) when testing substances at a 100% concentration in vitro.

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