

**Study Number:** MOG08002B  
**Test Type:** MOG  
**Route:** Dosing in Feed  
**Species/Strain:** Rat/Sprague-Dawley

**I05: Clinical Observations Summary**

**Test Compound:** Bisphenol AF  
**CAS Number:** 1478-61-1

**Date Report Requested:** 07/17/2020  
**Time Report Requested:** 10:55:24  
**Lab:** RTI

**Study Number:**

MOG08002B

**Study Gender:**

Both

**PWG Approval Date**

See web page for date of PWG Approval

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**F0 Female**

Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
GD	Eye Discharge Right; Red	0 / 30	0 / 32	1 / 33 GD 5	0 / 29
GD	Scab(s) Back	1 / 30 GD 7	0 / 32	0 / 33	0 / 29
GD	Scab(s) Face	0 / 30	0 / 32	1 / 33 GD 17	0 / 29
GD	Sore(s) On Body Face	0 / 30	0 / 32	1 / 33 GD 20	0 / 29
GD	Tail Damaged	0 / 30	1 / 32 GD 14	0 / 33	0 / 29
GD	Vaginal Discharge Red	0 / 30	0 / 32	0 / 33	1 / 29 GD 24
LD	Alopecia Abdomen	1 / 25 LD 14	0 / 28	0 / 28	0 / 25
LD	Alopecia Right Forelimb	1 / 25 LD 7	0 / 28	0 / 28	0 / 25
LD	Alopecia Right Inguinal	1 / 25 LD 7	0 / 28	0 / 28	0 / 25
LD	Delivering	3 / 25 LD 0	5 / 28 LD 0	10 / 28 LD 0	2 / 25 LD 0

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**F0 Female**

Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
LD	Eye Discharge Right; Red	0 / 25	0 / 28	2 / 28 LD 3	0 / 25
LD	Fur Stained Abdomen; Red	0 / 25	0 / 28	0 / 28	1 / 25 LD 0
LD	Nasal Discharge Brown	0 / 25	0 / 28	0 / 28	1 / 25 LD 1
LD	Nasal Discharge Red	0 / 25	0 / 28	0 / 28	1 / 25 LD 0
LD	Piloerection	0 / 25	0 / 28	0 / 28	1 / 25 LD 0
LD	Scab(s) Tail	1 / 25 LD 4	0 / 28	0 / 28	0 / 25
LD	Tail Damaged	0 / 25	1 / 28 LD 0	0 / 28	0 / 25

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**F1 Male: Subchronic Male**

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Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
PND	Testis Apparently Missing Bilateral	0 / 10	0 / 10	0 / 10	1 / 10 PND 59
PND	Testis Small Bilateral	0 / 10	0 / 10	0 / 10	1 / 10 PND 72

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**F1 Female: Subchronic Females**

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Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
PND	Alopecia Back	1 / 10 PND 38	0 / 10	0 / 10	0 / 10
PND	Fur Stained Abdomen; Yellow	0 / 10	0 / 10	0 / 10	1 / 10 PND 28
PND	Vaginal Thread	1 / 10 PND 36	2 / 10 PND 32	1 / 10 PND 28	0 / 10

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**F1 Male: Prenatal Males**

Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
PND	Alopecia Head	1 / 22 PND 28	0 / 21	0 / 22	0 / 20
PND	Eye Discharge Right; Brown	1 / 22 PND 91	0 / 21	0 / 22	0 / 20
PND	Tail Damaged	0 / 22	0 / 21	0 / 22	1 / 20 PND 77
PND	Testis Apparently Missing Bilateral	0 / 22	0 / 21	0 / 22	4 / 20 PND 49
PND	Testis Apparently Missing Left	0 / 22	0 / 21	0 / 22	1 / 20 PND 49
PND	Testis Apparently Missing Right	0 / 22	0 / 21	0 / 22	2 / 20 PND 56
PND	Testis Small Bilateral	0 / 22	0 / 21	0 / 22	12 / 20 PND 49
PND	Testis Small Left	0 / 22	0 / 21	0 / 22	2 / 20 PND 56
PND	Testis Small Right	0 / 22	0 / 21	0 / 22	1 / 20 PND 49

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**F1 Female: Prenatal Females**

Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
PND	Abnormal Posture	1 / 22 PND 63	0 / 21	0 / 22	0 / 20
PND	Alopecia Head	1 / 22 PND 28	0 / 21	0 / 22	0 / 20
PND	Convulsion	1 / 22 PND 63	0 / 21	0 / 22	0 / 20
PND	Delivering	0 / 22	0 / 21	1 / 22 PND 127	0 / 20
PND	Emaciated	0 / 22	0 / 21	0 / 22	2 / 20 PND 77
PND	Eye Discharge Left; Brown	1 / 22 PND 63	0 / 21	0 / 22	0 / 20
PND	Eye Discharge Left; Red	1 / 22 PND 41	0 / 21	0 / 22	1 / 20 PND 78
PND	Eye Squinting Bilateral	1 / 22 PND 63	0 / 21	0 / 22	0 / 20
PND	Fur Stained Abdomen; Yellow	0 / 22	0 / 21	0 / 22	1 / 20 PND 28
PND	Hypoactive	1 / 22 PND 63	0 / 21	0 / 22	0 / 20

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**F1 Female: Prenatal Females**

Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
PND	Piloerection	1 / 22 PND 63	0 / 21	0 / 22	0 / 20
PND	Prone	1 / 22 PND 63	0 / 21	0 / 22	0 / 20
PND	Rough Coat	1 / 22 PND 63	0 / 21	0 / 22	0 / 20
PND	Tail Damaged	0 / 22	0 / 21	0 / 22	1 / 20 PND 58
PND	Vaginal Discharge Red	0 / 22	0 / 21	1 / 22 PND 118	0 / 20
PND	Vaginal Thread	0 / 22	0 / 21	1 / 22 PND 92	3 / 20 PND 28
GD	Vaginal Thread	0 / 16	0 / 20	1 / 15 GD 0	



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**F1 Male: Fertility Males**

Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
PND	Alopecia Back	0 / 22	0 / 24	0 / 21	1 / 20 PND 77
PND	Alopecia Head	1 / 22 PND 28	0 / 24	1 / 21 PND 50	0 / 20
PND	Alopecia Neck	0 / 22	0 / 24	0 / 21	1 / 20 PND 41
PND	Scab(s) Back	0 / 22	0 / 24	1 / 21 PND 29	0 / 20
PND	Sore(s) On Body Back	0 / 22	0 / 24	1 / 21 PND 28	0 / 20
PND	Testis Apparently Missing Bilateral	0 / 22	0 / 24	0 / 21	9 / 20 PND 32
PND	Testis Apparently Missing Left	0 / 22	0 / 24	0 / 21	1 / 20 PND 53
PND	Testis Apparently Missing Right	0 / 22	0 / 24	0 / 21	2 / 20 PND 54
PND	Testis Small Bilateral	0 / 22	0 / 24	0 / 21	12 / 20 PND 44
PND	Testis Small Left	0 / 22	0 / 24	0 / 21	2 / 20 PND 54

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**F1 Male: Fertility Males**

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Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
PND	Testis Small Right	0 / 22	0 / 24	0 / 21	1 / 20 PND 53

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**F1 Female: Fertility Females**

Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
PND	Alopecia Back	1 / 22 PND 56	0 / 24	0 / 21	0 / 20
PND	Alopecia Nose/Snout	0 / 22	1 / 24 PND 111	0 / 21	0 / 20
PND	Eye Discharge Right; Red	1 / 22 PND 84	0 / 24	0 / 21	0 / 20
PND	Fur Stained Abdomen; Yellow	0 / 22	0 / 24	0 / 21	1 / 20 PND 33
PND	No Apparent Vaginal Opening	0 / 22	0 / 24	0 / 21	1 / 20 PND 33
PND	Sore(s) On Body Back	1 / 22 PND 41	0 / 24	0 / 21	0 / 20
PND	Vaginal Thread	3 / 22 PND 34	0 / 24	2 / 21 PND 28	4 / 20 PND 29
GD	Alopecia Nose/Snout	0 / 16	1 / 19 GD 0	0 / 9	
GD	Eye Discharge Bilateral; Red	0 / 16	1 / 19 GD 22	0 / 9	
GD	Vaginal Discharge Red	0 / 16	0 / 19	1 / 9 GD 23	

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**F1 Female: Fertility Females**

Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
LD	Alopecia Left Forelimb	1 / 18 LD 2	0 / 20	0 / 9	
LD	Alopecia Right Forelimb	1 / 18 LD 2	0 / 20	0 / 9	
LD	Convulsion	1 / 18 LD 21	0 / 20	0 / 9	
LD	Delivering	0 / 18	0 / 20	1 / 9 LD 0	
LD	Rough Coat	0 / 18	1 / 20 LD 0	0 / 9	
LD	Twitches	1 / 18 LD 21	0 / 20	0 / 9	
PND	Alopecia Back	1 / 22 PND 56	0 / 24	0 / 21	0 / 20
PND	Alopecia Nose/Snout	0 / 22	1 / 24 PND 111	0 / 21	0 / 20
PND	Eye Discharge Right; Red	1 / 22 PND 84	0 / 24	0 / 21	0 / 20
PND	Fur Stained Abdomen; Yellow	0 / 22	0 / 24	0 / 21	1 / 20 PND 33

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**F1 Female: Fertility Females**

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Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
PND	No Apparent Vaginal Opening	0 / 22	0 / 24	0 / 21	1 / 20 PND 33
PND	Sore(s) On Body Back	1 / 22 PND 41	0 / 24	0 / 21	0 / 20
PND	Vaginal Thread	3 / 22 PND 34	0 / 24	2 / 21 PND 28	4 / 20 PND 29

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**F1 Female: Bio&MGWM @ VO**

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Phase	Observation	Treatment Groups (ppm)			
		0	338	1125	3750
PND	No Apparent Vaginal Opening	0 / 12	0 / 11	0 / 5	1 / 8 PND 29
PND	Vaginal Thread	1 / 12 PND 36	1 / 11 PND 36	1 / 5 PND 31	1 / 8 PND 31

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**F2 Male**

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Phase	Observation	Treatment Groups (ppm)		
		0	338	1125
PND	Eye Discharge Right; Black	1 / 52 PND 91	0 / 70	0 / 27
PND	Eye Discharge Right; Red	1 / 52 PND 60	0 / 70	0 / 27
PND	Eye Small Right	0 / 52	1 / 70 PND 38	0 / 27
PND	Nasal Discharge Red	1 / 52 PND 65	0 / 70	0 / 27
PND	Tail Tip Missing	0 / 52	0 / 70	1 / 27 PND 28

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		F2 Female		
Phase	Observation	Treatment Groups (ppm)		
		0	338	1125
PND	Alopecia Back	0 / 78	1 / 77 PND 40	0 / 20
PND	Alopecia Chest	0 / 78	0 / 77	1 / 20 PND 28
PND	Eye Discharge Right; Black	1 / 78 PND 67	0 / 77	0 / 20
PND	Eye Discharge Right; Brown	1 / 78 PND 47	0 / 77	0 / 20
PND	Eye Discharge Right; Red	1 / 78 PND 30	0 / 77	0 / 20
PND	Tail Tip Missing	0 / 78	1 / 77 PND 28	1 / 20 PND 28
PND	Vaginal Thread	8 / 78 PND 33	3 / 77 PND 34	1 / 20 PND 28



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#### LEGEND

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Animals exhibiting clinical observations "within normal limits" were recorded as scheduled but are omitted from the table for clarity.

Upper row displays cumulative number of animals with observation / total animals started on study for SD days, total number of pregnant animals for GD days, or total number of littered females for LD days.

Lower row displays day of observation onset

SD – Study Day; GD – Gestation Day; LD – Lactation Day; PND – Postnatal Day, adults post-weaning

Females listed as SD were not pregnant

The F1 3750 ppm animals were unable to produce a F2 generation, hence this group was not evaluated.

**\*\* END OF REPORT \*\***