Test Type: MOG **Route:** Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

C Number:

Study Gender:

PWG Approval Date

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

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

MOG08002B

Both

See web page for date of PWG Approval

Date Report Requested: 03/20/2020

Time Report Requested: 12:03:36

Test Type: MOG

Route: Dosing in Feed

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

Test Compound: Bisphenol AF

CAS Number: 1478-61-1

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

Lab: RTI

	F0 Female				
	Treatment Groups (ppm)				
	0	338	1125	3750	
Disposition Summary					
Animals Initially In Study	35	35	35	35	
Early Deaths					
Scheduled Deaths					
Scheduled sacrifice, terminal (GD 18 - 24, LD 0 - 28, SD 24 - 27)	35	35	35	35	
Number of Animals Examined	3	2		2	
ALIMENTARY SYSTEM					
LIVER	(2)	(2)	(0)	(0)	
CARDIOVASCULAR SYSTEM					
None					
ENDOCRINE SYSTEM					
None					
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
OVARY	(3)	(0)	(0)	(0)	
UTERUS	(0)	(0)	(0)	(2)	
HEMATOLYMPHOID SYSTEM					
None					
INTEGUMENTARY SYSTEM					
None					
MUSCULOSKELETAL SYSTEM					
None					

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

Test Type: MOG
Route: Dosing in Feed

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

Lab: RTI

F0 Female						
		Treatment Groups (ppm)				
	0	338	1125	3750		
NERVOUS SYSTEM None						
RESPIRATORY SYSTEM None						
SPECIAL SENSES SYSTEM None						
URINARY SYSTEM None						

Test Type: MOG

Route: Dosing in Feed

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

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

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

Lab: RTI

F1 Male · Subchronic Male	F1	Male	· Sub	chro	nic	Male
---------------------------	----	------	-------	------	-----	------

	Treatment Groups (ppm)				
	0	338	1125	3750	
Disposition Summary					
Animals Initially In Study	10	10	10	10	
Early Deaths					
Scheduled Deaths					
Scheduled sacrifice, terminal (PND 115 - 119)	10	10	10	10	
Number of Animals Examined	10	10	10	10	
Total number litters	10	10	10	10	
ALIMENTARY SYSTEM					
LIVER	(10)	(0)	(2)	(10)	
PANCREAS	(10)	(0)	(0)	(10)	
CARDIOVASCULAR SYSTEM					
HEART	(10)	(0)	(0)	(10)	
ENDOCRINE SYSTEM					
None					
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
EPIDIDYMIS	(10)	(10)	(10)	(10)	
PENIS	(2)	(0)	(0)	(1)	
PREPUTIAL GLAND	(10)	(10)	(10)	(10)	
PROSTATE GLAND	(10)	(10)	(10)	(10)	
SEMINAL VESICLE	(10)	(10)	(10)	(10)	
TESTIS	(10)	(10)	(10)	(10)	

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence Test Compound: Bisphenol AF

CAS Number: 1478-61-1

Date Report Requested: 03/20/2020

Time Report Requested: 12:03:36

Lab: RTI

Route: Dosing in Feed

Test Type: MOG

F1 Male : Subchronic Male					
	Treatment Groups (ppm)				
	0	338	1125	3750	
HEMATOLYMPHOID SYSTEM None					
INTEGUMENTARY SYSTEM None					
MUSCULOSKELETAL SYSTEM None					
NERVOUS SYSTEM None					
RESPIRATORY SYSTEM None					
SPECIAL SENSES SYSTEM None					
URINARY SYSTEM KIDNEY	(10)	(0)	(0)	(10)	

Test Type: MOG

Route: Dosing in Feed

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

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

Species/Strain: Rat/Sprague-Dawley

Laba DE

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

F1	Femal	e : \$	Subchronic	Females

	Treatment Groups (ppm)				
	0	338	1125	3750	
Disposition Summary					
Animals Initially In Study	10	10	10	10	
Early Deaths					
Scheduled Deaths					
Scheduled sacrifice, terminal (PND 116 - 120)	10	10	10	10	
Number of Animals Examined	10	10	10	10	
Total number litters	10	10	10	10	
ALIMENTARY SYSTEM					
INTESTINE, RECTUM	(10)	(0)	(0)	(10)	
LIVER	(10)	(1)	(0)	(10)	
PANCREAS	(10)	(0)	(0)	(10)	
CARDIOVASCULAR SYSTEM					
HEART	(10)	(0)	(0)	(10)	
ENDOCRINE SYSTEM					
None					
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
CLITORAL GLAND	(10)	(1)	(0)	(10)	
OVARY	(10)	(10)	(10)	(10)	
UTERUS	(10)	(10)	(10)	(10)	
VAGINA	(10)	(10)	(10)	(10)	

URINARY BLADDER

Test Type: MOG

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

Date Report Requested: 03/20/2020

Time Report Requested: 12:03:36

Lab: RTI

(0)

(9)

Route: Dosing in Feed Species/Strain: Rat/Sprague-Dawley Test Compound: Bisphenol AF **CAS Number:** 1478-61-1

F1 Female : Subchronic Females						
		Treatment Groups (ppm)				
	0	338	1125	3750		
INTEGUMENTARY SYSTEM None						
MUSCULOSKELETAL SYSTEM None						
NERVOUS SYSTEM None						
RESPIRATORY SYSTEM None						
SPECIAL SENSES SYSTEM ZYMBALS GLAND	(10)	(0)	(0)	(10)		
URINARY SYSTEM KIDNEY	(10)	(0)	(0)	(10)		

(10)

(0)

Test Type: MOG

Route: Dosing in Feed

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

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

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

Lab: RTI

⊢ 1	Male	•	Prenatal Males

1 1 maie : 1 ferratar maies				
Treatment Groups (ppm)				
0	338	1125	3750	
22	21	22	20	
22	21	22	20	
7	3	2	20	
7	3	2	20	
(2)	(1)	(0)	(0)	
(2)	(0)	(0)	(12)	
(3)	(0)	(0)	(1)	
(2)	(0)	(1)	(18)	
(7)	(2)	(0)	(1)	
(2)	(0)	(0)	(18)	
(2)	(1)	(1)	(19)	
(3)	(0)	(0)	(1)	
	(2) (3) (2) (7) (2) (2) (7) (2) (2) (2)	Treatment G 0 338 22 21 22 21 7 3 7 3 (2) (1) (2) (0) (3) (0) (2) (0) (7) (2) (2) (0) (7) (2) (2) (0) (2) (1)	Treatment Groups (ppm) 0 338 1125 22 21 22 22 21 22 7 3 2 7 3 2 (2) (1) (0) (2) (0) (0) (3) (0) (0) (2) (0) (1) (7) (2) (0) (2) (0) (0) (2) (1) (1)	

Route: Dosing in Feed

Test Type: MOG

Species/Strain: Rat/Sprague-Dawley

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

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

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

F1 Male : Prenatal Males						
	<u></u>	Treatment C	Groups (ppm)			
	0	338	1125	3750		
HEMATOLYMPHOID SYSTEM None						
INTEGUMENTARY SYSTEM None						
MUSCULOSKELETAL SYSTEM None						
NERVOUS SYSTEM None						
RESPIRATORY SYSTEM None						
SPECIAL SENSES SYSTEM None						
URINARY SYSTEM None						

Test Type: MOG

Route: Dosing in Feed

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

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

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

F1 Female: Prenatal Females

·	- I remaie . I rematar i emaie				
	Treatment Groups (ppm)				
	0	338	1125	3750	
Disposition Summary					
Animals Initially In Study	22	21	22	20	
Early Deaths					
Euthanized, moribund	1				
Unscheduled Sacrifice				1	
Scheduled Deaths					
Scheduled sacrifice, terminal (GD 21, LD 0, PND 125 - 129)	21	21	22	19	
Number of Animals Examined	3		1	19	
Total number litters	3		1	19	
ALIMENTARY SYSTEM					
None					
CARDIOVASCULAR SYSTEM					
None					
ENDOCRINE SYSTEM					
None					
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
OVARY	(2)	(0)	(1)	(19)	
UTERUS	(0)	(0)	(1)	(19)	
HEMATOLYMPHOID SYSTEM					
None					
INTEGUMENTARY SYSTEM					
None					

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

Test Compound: Bisphenol AF

CAS Number: 1478-61-1

Date Report Requested: 03/20/2020

Time Report Requested: 12:03:36

Lab: RTI

Route: Dosing in Feed

Test Type: MOG

None

E4	Eamala	. D	ranata	l Females

	F1 Female : Prenatal Femal	es		
	Treatment Groups (ppm)			
	0	338	1125	3750
MUSCULOSKELETAL SYSTEM None				
NERVOUS SYSTEM None				
RESPIRATORY SYSTEM None				
SPECIAL SENSES SYSTEM None				
URINARY SYSTEM				

Test Type: MOG

Route: Dosing in Feed

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

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

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

F1 Male : Fertility Males

	Treatment Groups (ppm)			
	0	338	1125	3750
Disposition Summary				
Animals Initially In Study	22	24	21	20
Early Deaths				
Found Dead		1		
Scheduled Deaths				
Scheduled sacrifice, terminal (PND 152 - 154)	22	23	21	20
Number of Animals Examined	22	24	21	20
Total number litters	22	24	21	20
ALIMENTARY SYSTEM				
LIVER	(2)	(1)	(0)	(0)
LEUKEMIA; MALIGNANT		1 (100%) [1]		
CARDIOVASCULAR SYSTEM				
None				
ENDOCRINE SYSTEM				
None				

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence Test Compound: Bisphenol AF

Date Report Requested: 03/20/2020

Time Report Requested: 12:03:36

Lab: RTI

Test Type: MOG Route: Dosing in Feed

None

None

SPECIAL SENSES SYSTEM

Species/Strain: Rat/Sprague-Dawley

CAS Number: 1478-61-1

F1 Male: Fertility Males

F1 Male : Fertility Males				
		Treatment 0	Groups (ppm)	
	0	338	1125	3750
GENITAL SYSTEM				
COAGULATING GLAND	(22)	(24)	(21)	(20)
COWPERS GLAND	(22)	(24)	(21)	(18)
EPIDIDYMIS	(22)	(24)	(21)	(20)
LEVATOR ANI PLUS BULBOCAVERNOSUS MUSCLE	(22)	(24)	(21)	(20)
PENIS, GLANS	(0)	(0)	(0)	(1)
PREPUTIAL GLAND	(22)	(24)	(21)	(20)
PROSTATE GLAND	(22)	(24)	(21)	(20)
SEMINAL VESICLE	(22)	(24)	(21)	(20)
TESTIS	(22)	(24)	(21)	(20)
HEMATOLYMPHOID SYSTEM				
SPLEEN	(0)	(1)	(0)	(0)
LEUKEMIA		1 (100%) [1]		
INTEGUMENTARY SYSTEM				
None				
MUSCULOSKELETAL SYSTEM				
None				
NERVOUS SYSTEM				
None				
RESPIRATORY SYSTEM				

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

Date Report Requested: 03/20/2020

Time Report Requested: 12:03:36

Test Type: MOG Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

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

Lab: RTI

F1 Male: Fertility Males

Treatment Groups (ppm) 3750 338 1125 0

URINARY SYSTEM

None

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

Test Compound: Bisphenol AF

CAS Number: 1478-61-1

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

Lab: RTI

Test Type: MOG

None

Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

F1 Female : Fertility Females

		Treatment G	Froups (ppm)	
	0	338	1125	3750
Disposition Summary				
Animals Initially In Study	22	24	21	20
Early Deaths				
Unscheduled Sacrifice				1
Scheduled Deaths				
Scheduled sacrifice, terminal (GD 46 - 50, LD 26 - 28, PND 158 - 162)	22	24	21	19
Number of Animals Examined	22	24	21	20
Total number litters	22	24	21	20
ALIMENTARY SYSTEM				
None				
CARDIOVASCULAR SYSTEM				
None				
ENDOCRINE SYSTEM				
None				
GENERAL BODY SYSTEM				
None				
GENITAL SYSTEM				
CERVIX	(22)	(24)	(21)	(20)
OVARY	(22)	(24)	(21)	(20)
UTERUS	(22)	(24)	(21)	(20)
VAGINA	(22)	(24)	(21)	(20)

Route: Dosing in Feed

None

Test Type: MOG

Species/Strain: Rat/Sprague-Dawley

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

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

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

F1 Female : Fertility F	emales

F1 Female : Fertility Females				
	Treatment Groups (ppm)			
	0	338	1125	3750
INTEGUMENTARY SYSTEM None				
MUSCULOSKELETAL SYSTEM None				
NERVOUS SYSTEM None				
RESPIRATORY SYSTEM None				
SPECIAL SENSES SYSTEM None				
URINARY SYSTEM				

Test Type: MOG

Route: Dosing in Feed

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

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

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

F1 Male: F1 Extra Males

	Treatment Groups (ppm)			
		Treatment C	поира (ррпі)	
	0	338	1125	3750
Disposition Summary				
Animals Initially In Study	21	46	46	40
Early Deaths				
Scheduled Deaths				
Scheduled sacrifice, terminal (PND 28)	21	46	46	40
Number of Animals Examined	3		8	20
Total number litters	2		5	9
ALIMENTARY SYSTEM				
None				
CARDIOVASCULAR SYSTEM				
None				
ENDOCRINE SYSTEM				
None				
GENERAL BODY SYSTEM				
None				
GENITAL SYSTEM				
EPIDIDYMIS	(2)	(0)	(8)	(17)
TESTIS	(2)	(0)	(8)	(20)
HEMATOLYMPHOID SYSTEM				
None				

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

Test Type: MOG

Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

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

F1 Male : F1 Extra Males					
		Treatment Groups (ppm)			
	0	338	1125	3750	
MUSCULOSKELETAL SYSTEM None					
NERVOUS SYSTEM None					
RESPIRATORY SYSTEM None					
SPECIAL SENSES SYSTEM None					
URINARY SYSTEM KIDNEY	(2)	(0)	(0)	(0)	

Test Type: MOG

Route: Dosing in Feed

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

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

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

F1 Female: F1 Extra Females

	1 1 1 emale . 1 1 Extra 1 emales				
	Treatment Groups (ppm)				
	0	338	1125	3750	
Disposition Summary					
Animals Initially In Study	45	29	48	17	
Early Deaths					
Scheduled Deaths					
Scheduled sacrifice, terminal (PND 28)	45	29	48	17	
Number of Animals Examined	1				
Total number litters	1				
ALIMENTARY SYSTEM					
None					
CARDIOVASCULAR SYSTEM					
None					
ENDOCRINE SYSTEM					
None					
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
None					
HEMATOLYMPHOID SYSTEM					
None					
INTEGUMENTARY SYSTEM					
None					
MUSCULOSKELETAL SYSTEM					
None					

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

Date Report Requested: 03/20/2020

Time Report Requested: 12:03:36

Lab: RTI

Test Type: MOG Route: Dosing in Feed

NERVOUS SYSTEM

URINARY SYSTEM

RESPIRATORY SYSTEM

SPECIAL SENSES SYSTEM

None

None

None

None

Species/Strain: Rat/Sprague-Dawley

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

F1	Female : F1 Extra Females	S			
		Treatment G	roups (ppm)		
	0	338	1125	3750	
					_
					_
					_
					_

Test Type: MOG

Route: Dosing in Feed

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

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

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

F1 Male: PND28 Bio&MGWM Male

		-		
		Treatment G	Groups (ppm)	
	0	338	1125	3750
isposition Summary				
Animals Initially In Study	12	12	12	12
Early Deaths				
Scheduled Deaths				
Scheduled sacrifice, terminal (PND 28)	12	12	12	12
Number of Animals Examined			1	3
Total number litters			1	3
LIMENTARY SYSTEM				,
None				
ARDIOVASCULAR SYSTEM				
None				
NDOCRINE SYSTEM				
None				
ENERAL BODY SYSTEM				
None				
ENITAL SYSTEM				
EPIDIDYMIS	(0)	(0)	(0)	(3)
TESTIS	(0)	(0)	(1)	(3)
EMATOLYMPHOID SYSTEM				
None				

MUSCULOSKELETAL SYSTEM

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

Date Report Requested: 03/20/2020

Lab: RTI

Time Report Requested: 12:03:36

Test Type: MOG Route: Dosing in Feed

None

None

None

None

None

NERVOUS SYSTEM

URINARY SYSTEM

RESPIRATORY SYSTEM

SPECIAL SENSES SYSTEM

Species/Strain: Rat/Sprague-Dawley

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

F

F1 Male : PND28 Bio&MGWM Male									
	Treatment Groups (ppm)								
	0	338	1125	3750					

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence Test Compound: Bisphenol AF

CAS Number: 1478-61-1

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

Lab: RTI

Test Type: MOG Route: Dosing in Feed

None

	F1 Female : Bio&MGWM @ \			
		Treatment G	Groups (ppm)	
	0	338	1125	3750
Disposition Summary				
Animals Initially In Study	12	12	12	12
Early Deaths				
Unscheduled Sacrifice				1
Scheduled Deaths				
Scheduled sacrifice, terminal (PND 26 - 39)	12	12	12	11
Number of Animals Examined	12	12	12	12
Total number litters	12	11	9	12
ALIMENTARY SYSTEM				
None				
CARDIOVASCULAR SYSTEM				
None				
ENDOCRINE SYSTEM				
None				
GENERAL BODY SYSTEM				
None				
GENITAL SYSTEM				
OVARY	(12)	(12)	(12)	(12)
OVIDUCT	(0)	(0)	(0)	(1)
UTERUS	(2)	(0)	(0)	(1)
VAGINA	(2)	(0)	(0)	(1)

Test Type: MOG

Route: Dosing in Feed

URINARY SYSTEM

None

Species/Strain: Rat/Sprague-Dawley

PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

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

Date Report Requested: 03/20/2020 Time Report Requested: 12:03:36

F1 Female : Bio&MGWM @ VO						
		Treatment Groups (ppm)				
	0	338	1125	3750		
INTEGUMENTARY SYSTEM None						
MUSCULOSKELETAL SYSTEM None						
NERVOUS SYSTEM None						
RESPIRATORY SYSTEM None						
SPECIAL SENSES SYSTEM None						

Study Number: MOG08002B PA08R: Statistical Analysis of Neoplastic Lesions with Litter Incidence

Test Type: MOG
Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

A08R: Statistical Analysis of Neoplastic Lesions with Litter Incide

Test Compound: Bisphenol AF

CAS Number: 1478-61-1

Date Report Requested: 03/20/2020
Time Report Requested: 12:03:36

Lab: RTI

LEGEND

Number of animals examined for each tissue shown in parentheses. If none of the animals examined have the specific lesion then there is a blank for that dose group for that specific lesion. The exception to this is if statistical significance is found for a lesion and the control group has no animals with the lesion then a 0 is included for the control group on the table for that lesion.

Number of animals with observation reported with percent incidence in parentheses

Number of litters with observations shown in square brackets for F1 and F2 animals. F1 litter incidence based on the number of F0 dams; F2 litter incidence based on number of F1 dams.

Trend p-values are reported only for those organs that were fully examined in the control group plus two or more other dose groups. For organs that were fully examined in just the control and one other dose group, only the pairwise p-values are reported.

All trend and pairwise p-values are reported as one-sided.

Non-pregnant females from the F0 and F1 generations are included in the analysis.

Statistical significance for the control group indicates a significant trend test

Statistical significance for a treatment group indicates a significant pairwise test compared to the vehicle control group

Statistical analysis performed by Cochran-Armitage test with poly-3 adjustment for both trend and pairwise tests for the F1 Fertility and F1 Subchronic animals.

- * Statistically significant at P <= 0.05
- ** Statistically significant at P <= 0.01

** END OF REPORT **