Test Type: MOG Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

C Number:

Study Gender:

PWG Approval Date

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

MOG08002B

Both

See web page for date of PWG Approval

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

	F0 Female			
		Treatment C	Groups (ppm)	
	0	338	1125	3750
Disposition Summary				
Animals Initially In Study	35	35	35	35
Scheduled Sacrifice				
Early Deaths				
Scheduled Deaths	0.5	0.5	0.5	25
Scheduled sacrifice, terminal (GD 18 - 24, LD 0 - 28, SD 24 - 27)	35	35	35	35
Animals Examined Microscopically	3	2		2
ALIMENTARY SYSTEM				
LIVER	(2)	(2)	(0)	(0)
CARDIOVASCULAR SYSTEM				
No Tissues/Organs Examined				
ENDOCRINE SYSTEM				
No Tissues/Organs Examined				
GENERAL BODY SYSTEM				
No Tissues/Organs Examined				
GENITAL SYSTEM				
OVARY	(3)	(0)	(0)	(0)
UTERUS	(0)	(0)	(0)	(2)
HEMATOLYMPHOID SYSTEM				
No Tissues/Organs Examined				
INTEGUMENTARY SYSTEM				
No Tissues/Organs Examined				
MUSCULOSKELETAL SYSTEM				
No Tissues/Organs Examined				
NERVOUS SYSTEM				
No Tissues/Organs Examined				

Route: Dosing in Feed

Test Type: MOG

Species/Strain: Rat/Sprague-Dawley

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

	F0 Female				
		Treatment Groups (ppm)			
	0	338	1125	3750	
RESPIRATORY SYSTEM No Tissues/Organs Examined					
SPECIAL SENSES SYSTEM No Tissues/Organs Examined					
URINARY SYSTEM No Tissues/Organs Examined					
No Systemic Lesions					

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019
Time Report Requested: 12:20:37

Lab: RTI

Tumor Summary Data for F0 Female	Treatment Groups (ppm)				
	0	338	1125	3750	
Total Animals with Primary Neoplasms	0	0	0	0	
Total Primary Neoplasms	0	0	0	0	
Total Animals with Benign Neoplasms	0	0	0	0	
Total Benign Neoplasms	0	0	0	0	
Total Animals with Malignant Neoplasms	0	0	0	0	
Total Malignant Neoplasms	0	0	0	0	
Total Animals with Metastatic Neoplasms	0	0	0	0	
Total Metastatic Neoplasms	0	0	0	0	
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0	

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

F1 Male: Subchronic Male

		Treatment G	roups (ppm)	
	0	338	1125	3750
Disposition Summary				
Animals Initially In Study	10	10	10	10
Scheduled Sacrifice				
Early Deaths				
Scheduled Deaths				
Scheduled sacrifice, terminal (PND 115 - 119)	10	10	10	10
Animals Examined Microscopically	10	10	10	10
Total number litters	10	10	10	10
ALIMENTARY SYSTEM				
ESOPHAGUS	(10)	(0)	(0)	(10)
INTESTINE, CECUM	(10)	(0)	(0)	(10)
INTESTINE, COLON	(10)	(0)	(0)	(10)
INTESTINE, DUODENUM	(10)	(0)	(0)	(10)
INTESTINE, ILEUM	(10)	(0)	(0)	(10)
INTESTINE, JEJUNUM	(10)	(0)	(0)	(10)
INTESTINE, RECTUM	(10)	(0)	(0)	(10)
LIVER	(10)	(0)	(2)	(10)
PANCREAS	(10)	(0)	(0)	(10)
SALIVARY GLAND	(10)	(0)	(0)	(10)
STOMACH	(10)	(0)	(0)	(10)
CARDIOVASCULAR SYSTEM				
AORTA	(10)	(0)	(0)	(10)
HEART	(10)	(0)	(0)	(10)

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

F1 Male: Subchronic Male

	1 1 Maie. Subcilionic Maie				
		Treatment C	Groups (ppm)		
	0	338	1125	3750	
ENDOCRINE SYSTEM					
ADRENAL GLAND	(10)	(0)	(0)	(10)	
PARATHYROID GLAND	(10)	(0)	(0)	(10)	
PITUITARY GLAND	(10)	(0)	(0)	(10)	
THYROID GLAND	(10)	(0)	(0)	(10)	
GENERAL BODY SYSTEM					
No Tissues/Organs Examined					
GENITAL SYSTEM					
COAGULATING GLAND	(10)	(10)	(10)	(9)	
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)	
HEMATOLYMPHOID SYSTEM					
BONE MARROW, FEMUR	(10)	(0)	(0)	(10)	
LYMPH NODE, MANDIBULAR	(10)	(0)	(0)	(10)	
LYMPH NODE, MESENTERIC	(10)	(0)	(0)	(10)	
SPLEEN	(10)	(0)	(0)	(10)	
THYMUS	(9)	(0)	(0)	(10)	
INTEGUMENTARY SYSTEM					
MAMMARY GLAND	(9)	(0)	(0)	(9)	
SKIN	(10)	(0)	(0)	(10)	
MUSCULOSKELETAL SYSTEM					
BONE, FEMUR	(10)	(0)	(0)	(10)	
NASAL TURBINATES	(10)	(0)	(0)	(9)	

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence Test Compound: Bisphenol AF

CAS Number: 1478-61-1

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Route: Dosing in Feed

Test Type: MOG

Species/Strain: Rat/Sprague-Dawley

E1 Male: Subchronic Male

	F1 Male: Subchronic Male			
	Treatment Groups (ppm)			
	0	338	1125	3750
NERVOUS SYSTEM				
BRAIN	(10)	(0)	(0)	(10)
RESPIRATORY SYSTEM				
LUNGS WITH BRONCHI	(10)	(0)	(0)	(10)
TRACHEA	(10)	(0)	(0)	(10)
SPECIAL SENSES SYSTEM				
EYE	(10)	(0)	(0)	(10)
HARDERIAN GLAND	(10)	(0)	(0)	(10)
ZYMBALS GLAND	(7)	(0)	(0)	(10)
URINARY SYSTEM				
KIDNEY	(10)	(0)	(0)	(10)
URINARY BLADDER	(10)	(0)	(0)	(10)
No Systemic Lesions				

Study Number: MOG08002B Test Type: MOG

Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Total Animals with Primary Neoplasms Total Primary Neoplasms Total Animals with Benign Neoplasms Total Benign Neoplasms Total Animals with Malignant Neoplasms Total Malignant Neoplasms	Treatment Groups (ppm)				
	0	338	1125	3750	
Total Animals with Primary Neoplasms	0	0	0	0	
Total Primary Neoplasms	0	0	0	0	
Total Animals with Benign Neoplasms	0	0	0	0	
Total Benign Neoplasms	0	0	0	0	
Total Animals with Malignant Neoplasms	0	0	0	0	
Total Malignant Neoplasms	0	0	0	0	
Total Animals with Metastatic Neoplasms	0	0	0	0	
Total Metastatic Neoplasms	0	0	0	0	
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0	

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

F1 Female: Subchronic Females

		Treatment 0	Groups (ppm)	
	0	338	1125	3750
Disposition Summary				
Animals Initially In Study	10	10	10	10
Scheduled Sacrifice				
Early Deaths				
Scheduled Deaths				
Scheduled sacrifice, terminal (PND 116 - 120)	10	10	10	10
Animals Examined Microscopically	10	10	10	10
Total number litters	10	10	10	10
ALIMENTARY SYSTEM				
ESOPHAGUS	(10)	(0)	(0)	(10)
INTESTINE, CECUM	(10)	(0)	(0)	(10)
INTESTINE, COLON	(10)	(0)	(0)	(10)
INTESTINE, DUODENUM	(10)	(0)	(0)	(10)
INTESTINE, ILEUM	(10)	(0)	(0)	(10)
INTESTINE, JEJUNUM	(10)	(0)	(0)	(10)
INTESTINE, RECTUM	(10)	(0)	(0)	(10)
LIVER	(10)	(1)	(0)	(10)
PANCREAS	(10)	(0)	(0)	(10)
SALIVARY GLAND	(10)	(0)	(0)	(10)
STOMACH	(10)	(0)	(0)	(10)
CARDIOVASCULAR SYSTEM				
AORTA	(10)	(0)	(0)	(10)
HEART	(10)	(0)	(0)	(10)

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

F1 Female: Subchronic Females

		Treatment G	Groups (ppm)		
	0	338	1125	3750	
ENDOCRINE SYSTEM					
ADRENAL GLAND	(10)	(0)	(0)	(10)	
PARATHYROID GLAND	(7)	(0)	(0)	(8)	
PITUITARY GLAND	(10)	(0)	(0)	(10)	
THYROID GLAND	(10)	(0)	(0)	(10)	
GENERAL BODY SYSTEM					
No Tissues/Organs Examined					
GENITAL SYSTEM					
CERVIX	(10)	(10)	(10)	(10)	
CLITORAL GLAND	(10)	(1)	(0)	(10)	
OVARY	(10)	(10)	(10)	(10)	
UTERUS	(10)	(10)	(10)	(10)	
VAGINA	(10)	(10)	(10)	(10)	
HEMATOLYMPHOID SYSTEM					
BONE MARROW, FEMUR	(10)	(0)	(0)	(10)	
LYMPH NODE, MANDIBULAR	(10)	(0)	(0)	(10)	
LYMPH NODE, MESENTERIC	(9)	(0)	(0)	(10)	
SPLEEN	(10)	(0)	(0)	(10)	
THYMUS	(10)	(0)	(0)	(10)	
INTEGUMENTARY SYSTEM					
MAMMARY GLAND	(10)	(0)	(0)	(10)	
SKIN	(10)	(0)	(0)	(10)	
MUSCULOSKELETAL SYSTEM					
BONE, FEMUR	(10)	(0)	(0)	(10)	
NASAL TURBINATES	(10)	(0)	(0)	(10)	
NERVOUS SYSTEM					
BRAIN	(10)	(0)	(0)	(10)	

Test Type: MOG

Route: Dosing in Feed Species/Strain: Rat/Sprague-Dawley

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

F1 Female: Subchronic Females

		Treatment Groups (ppm)			
	0	338	1125	3750	
RESPIRATORY SYSTEM					
LUNGS WITH BRONCHI	(10)	(0)	(0)	(10)	
TRACHEA	(10)	(0)	(0)	(10)	
SPECIAL SENSES SYSTEM					
EYE	(10)	(0)	(0)	(10)	
HARDERIAN GLAND	(10)	(0)	(0)	(10)	
ZYMBALS GLAND	(10)	(0)	(0)	(10)	
JRINARY SYSTEM					
KIDNEY	(10)	(0)	(0)	(10)	
URINARY BLADDER	(10)	(0)	(0)	(9)	

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

Study Number: MOG08002B

Test Type: MOG

Route: Dosing in Feed

Total Primary Neoplasms otal Animals with Benign Neoplasms Total Benign Neoplasms	Treatment Groups (ppm)				
	0	338	1125	3750	
Total Animals with Primary Neoplasms	0	0	0	0	
Total Primary Neoplasms	0	0	0	0	
Total Animals with Benign Neoplasms	0	0	0	0	
Total Benign Neoplasms	0	0	0	0	
Total Animals with Malignant Neoplasms	0	0	0	0	
Total Malignant Neoplasms	0	0	0	0	
Total Animals with Metastatic Neoplasms	0	0	0	0	
Total Metastatic Neoplasms	0	0	0	0	
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0	

Test Type: MOG

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Lab: RTI

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Route: Dosing in Feed
Species/Strain: Rat/Sprague-Dawley

F1 Male: Prenatal Males

		Treatment 0	Groups (ppm)	
	0	338	1125	3750
Disposition Summary				
Animals Initially In Study	22	21	22	20
Scheduled Sacrifice				
Early Deaths				
Scheduled Deaths				
Scheduled sacrifice, terminal (PND 119 - 121)	22	21	22	20
Animals Examined Microscopically	7	3	2	20
Total number litters	7	3	2	20
ALIMENTARY SYSTEM				
INTESTINE, COLON	(2)	(1)	(0)	(0)
CARDIOVASCULAR SYSTEM				
No Tissues/Organs Examined				
ENDOCRINE SYSTEM				
No Tissues/Organs Examined				
GENERAL BODY SYSTEM				
No Tissues/Organs Examined				
GENITAL SYSTEM				
COWPERS GLAND	(2)	(0)	(1)	(16)
EPIDIDYMIS	(3)	(0)	(0)	(1)
LEVATOR ANI PLUS BULBOCAVERNOSUS MUSCLE	(2)	(0)	(1)	(18)
PREPUTIAL GLAND	(7)	(2)	(0)	(1)
PROSTATE GLAND	(2)	(0)	(0)	(19)
SEMINAL VESICLE	(2)	(1)	(1)	(19)
TESTIS	(3)	(0)	(0)	(1)

Test Type: MOG

Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

F1 Male: Prenatal Males				
		Treatment Groups (ppm)		
	0	338	1125	3750
INTEGUMENTARY SYSTEM No Tissues/Organs Examined				
MUSCULOSKELETAL SYSTEM No Tissues/Organs Examined				
NERVOUS SYSTEM No Tissues/Organs Examined				
RESPIRATORY SYSTEM No Tissues/Organs Examined				
SPECIAL SENSES SYSTEM No Tissues/Organs Examined				
URINARY SYSTEM No Tissues/Organs Examined				
No Systemic Lesions				

Test Type: MOG

Route: Dosing in Feed
Species/Strain: Rat/Sprague-Dawley

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Tumor Summary Data for F1 Male Prenatal Males	Treatment Groups (ppm)			
	0	338	1125	3750
Total Animals with Primary Neoplasms	0	0	0	0
Total Primary Neoplasms	0	0	0	0
Total Animals with Benign Neoplasms	0	0	0	0
Total Benign Neoplasms	0	0	0	0
Total Animals with Malignant Neoplasms	0	0	0	0
Total Malignant Neoplasms	0	0	0	0
Total Animals with Metastatic Neoplasms	0	0	0	0
Total Metastatic Neoplasms	0	0	0	0
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Species/Strain: Rat/Sprague-Dawley

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

F1 Female: Prenatal Females

	Treatment Groups (ppm)			
	0	338	1125	3750
Disposition Summary	-			
Animals Initially In Study	22	21	22	20
Scheduled Sacrifice				
Early Deaths				
Euthanized, moribund	1			
Unscheduled Sacrifice				1
Scheduled Deaths				
Scheduled sacrifice, terminal (GD 21, LD 0, PND 125 - 129)	21	21	22	19
Animals Examined Microscopically	3		1	19
Total number litters	3		1	19
ALIMENTARY SYSTEM				
No Tissues/Organs Examined				
CARDIOVASCULAR SYSTEM				
No Tissues/Organs Examined				
ENDOCRINE SYSTEM				
No Tissues/Organs Examined				
GENERAL BODY SYSTEM				
No Tissues/Organs Examined				
GENITAL SYSTEM				
CERVIX	(0)	(0)	(1)	(19)
OVARY	(2)	(0)	(1)	(19)
UTERUS	(0)	(0)	(1)	(19)
VAGINA	(0)	(0)	(1)	(19)
HEMATOLYMPHOID SYSTEM				
No Tissues/Organs Examined				

Test Type: MOG

Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

F1	Female:	Prenatal	Females

	Treatment Groups (ppm)			
	0	338	1125	3750
INTEGUMENTARY SYSTEM No Tissues/Organs Examined				
MUSCULOSKELETAL SYSTEM No Tissues/Organs Examined				
NERVOUS SYSTEM BRAIN	(1)	(0)	(0)	(0)
RESPIRATORY SYSTEM No Tissues/Organs Examined				
SPECIAL SENSES SYSTEM No Tissues/Organs Examined				
URINARY SYSTEM No Tissues/Organs Examined				
No Systemic Lesions				

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

Study Number: MOG08002B

Test Type: MOG

Route: Dosing in Feed

Tumor Summary Data for F1 Female Prenatal Females	Treatment Groups (ppm)			
	0	338	1125	3750
Total Animals with Primary Neoplasms	0	0	0	0
Total Primary Neoplasms	0	0	0	0
Total Animals with Benign Neoplasms	0	0	0	0
Total Benign Neoplasms	0	0	0	0
Total Animals with Malignant Neoplasms	0	0	0	0
Total Malignant Neoplasms	0	0	0	0
Total Animals with Metastatic Neoplasms	0	0	0	0
Total Metastatic Neoplasms	0	0	0	0
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

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
Scheduled Sacrifice				
Early Deaths				
Found Dead		1		
Scheduled Deaths				
Scheduled sacrifice, terminal (PND 152 - 154)	22	23	21	20
Animals Examined Microscopically	22	24	21	20
Total number litters	22	24	21	20
ALIMENTARY SYSTEM				
LIVER	(2)	(1)	(1)	(0)
LEUKEMIA; MALIGNANT	1 (100%) [1]			
CARDIOVASCULAR SYSTEM				
No Tissues/Organs Examined				
ENDOCRINE SYSTEM				
PITUITARY GLAND	(22)	(0)	(0)	(20)
GENERAL BODY SYSTEM				
No Tissues/Organs Examined				

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence
Test Compound: Bisphenol AF

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Test Type: MOG

Route: Dosing in Feed

CAS Number: 1478-61-1

Lab: RTI

F1 Male: Fertility N	/lales
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	Treatment Groups (ppm)			
	0	338	1125	3750
GENITAL SYSTEM				
COAGULATING GLAND	(22)	(24)	(21)	(20)
COWPERS GLAND	(22)	(24)	(21)	(20)
EPIDIDYMIS	(22)	(24)	(21)	(20)
LEVATOR ANI PLUS BULBOCAVERNOSUS MUSCLE	(22)	(24)	(21)	(20)
PENIS	(1)	(0)	(0)	(0)
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				
No Tissues/Organs Examined				
MUSCULOSKELETAL SYSTEM				
No Tissues/Organs Examined				
NERVOUS SYSTEM				
No Tissues/Organs Examined				
RESPIRATORY SYSTEM				
No Tissues/Organs Examined				
SPECIAL SENSES SYSTEM				
No Tissues/Organs Examined				
URINARY SYSTEM				
No Tissues/Organs Examined				

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

Test Compound: Bisphenol AF

CAS Number: 1478-61-1

Date Report Requested: 08/27/2019

Time Report Requested: 12:20:37

Lab: RTI

Test Type: MOG Route: Dosing in Feed

F1 Male: Fertility Males				
		Treatment Groups (ppm)		
	0	338	1125	3750
SYSTEMIC LESIONS				
Multiple Organ(a)	(0)	(1)	(0)	(0)
LEUKEMIA		1 (100%) [1]		

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Tumor Summary Data for F1 Male Fertility Males	Treatment Groups (ppm)			
	0	338	1125	3750
Total Animals with Primary Neoplasms	0	0	0	0
Total Primary Neoplasms	0	0	0	0
Total Animals with Benign Neoplasms	0	0	0	0
Total Benign Neoplasms	0	0	0	0
Total Animals with Malignant Neoplasms	0	1	0	0
Total Malignant Neoplasms	0	2	0	0
Total Animals with Metastatic Neoplasms	0	0	0	0
Total Metastatic Neoplasms	0	0	0	0
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

F1	Female:	Fertility	/ Females
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_	Treatment Groups (ppm)				
	0	338	1125	3750	
Disposition Summary					
Animals Initially In Study	22	24	21	20	
Scheduled Sacrifice					
Early Deaths					
Unscheduled Sacrifice				1	
Scheduled Deaths					
Scheduled sacrifice, terminal (GD 46 - 50, LD 26 - 28, PND 158 - 162)	22	24	21	19	
Animals Examined Microscopically	22	24	21	20	
Total number litters	22	24	21	20	
ALIMENTARY SYSTEM					
No Tissues/Organs Examined					
CARDIOVASCULAR SYSTEM					
No Tissues/Organs Examined					
ENDOCRINE SYSTEM					
PITUITARY GLAND	(22)	(0)	(0)	(19)	
GENERAL BODY SYSTEM					
No Tissues/Organs Examined					
GENITAL SYSTEM					
CERVIX	(22)	(24)	(21)	(20)	
OVARY	(22)	(24)	(21)	(20)	
OVIDUCT	(1)	(0)	(0)	(1)	
UTERUS	(22)	(24)	(21)	(20)	
VAGINA	(22)	(24)	(21)	(20)	

Test Type: MOG

Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

F1 Female: Fertility Fema	les
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	Treatment Groups (ppm)			
	0	338	1125	3750
INTEGUMENTARY SYSTEM No Tissues/Organs Examined				
MUSCULOSKELETAL SYSTEM No Tissues/Organs Examined				
NERVOUS SYSTEM BRAIN	(3)	(0)	(0)	(0)
RESPIRATORY SYSTEM No Tissues/Organs Examined				
SPECIAL SENSES SYSTEM No Tissues/Organs Examined				
URINARY SYSTEM No Tissues/Organs Examined				_
No Systemic Lesions				

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Tumor Summary Data for F1 Female Fertility Females		Treatment G	Groups (ppm)	
	0	338	1125	3750
Total Animals with Primary Neoplasms	0	0	0	0
Total Primary Neoplasms	0	0	0	0
Total Animals with Benign Neoplasms	0	0	0	0
Total Benign Neoplasms	0	0	0	0
Total Animals with Malignant Neoplasms	0	0	0	0
Total Malignant Neoplasms	0	0	0	0
Total Animals with Metastatic Neoplasms	0	0	0	0
Total Metastatic Neoplasms	0	0	0	0
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

F1 Male: F1 Extra Males

	FI Male. FI Extra Males			
	Treatment Groups (ppm)			
	0	338	1125	3750
Disposition Summary				
Animals Initially In Study	21	46	46	40
Scheduled Sacrifice				
Early Deaths				
Scheduled Deaths	04	40	40	40
Scheduled sacrifice, terminal (PND 28)	21	46	46	40
Animals Examined Microscopically	3		8	20
Total number litters	2		5	9
ALIMENTARY SYSTEM				
No Tissues/Organs Examined				
CARDIOVASCULAR SYSTEM				
No Tissues/Organs Examined				
ENDOCRINE SYSTEM				
No Tissues/Organs Examined				
GENERAL BODY SYSTEM				
No Tissues/Organs Examined				
GENITAL SYSTEM				
EPIDIDYMIS	(2)	(0)	(8)	(18)
TESTIS	(2)	(0)	(8)	(20)
HEMATOLYMPHOID SYSTEM				
No Tissues/Organs Examined				
INTEGUMENTARY SYSTEM				
No Tissues/Organs Examined				
MUSCULOSKELETAL SYSTEM				
No Tissues/Organs Examined				

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

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

Lab: RTI

C 4	Mala	. 64	Evtro	Males	
- 1	water		EXIIA	IVIAIRS	

	Treatment Groups (ppm)			
0	338	1125	3750	
(2)	(0)	(0)	(0)	

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019
Time Report Requested: 12:20:37

Lab: RTI

Tumor Summary Data for F1 Male F1 Extra Males	Treatment Groups (ppm)				
	0	338	1125	3750	
Total Animals with Primary Neoplasms	0	0	0	0	
Total Primary Neoplasms	0	0	0	0	
Total Animals with Benign Neoplasms	0	0	0	0	
Total Benign Neoplasms	0	0	0	0	
Total Animals with Malignant Neoplasms	0	0	0	0	
Total Malignant Neoplasms	0	0	0	0	
Total Animals with Metastatic Neoplasms	0	0	0	0	
Total Metastatic Neoplasms	0	0	0	0	
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0	

Test Type: MOG

Route: Dosing in Feed Species/Strain: Rat/Sprague-Dawley

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

F1 Female: F1 Extra Females

		Treatment G	Groups (ppm)	
	0	338	1125	3750
Disposition Summary				
Animals Initially In Study	45	29	48	17
Scheduled Sacrifice				
Early Deaths				
Scheduled Deaths			4.0	
Scheduled sacrifice, terminal (PND 28)	45 1	29	48	17
Animals Examined Microscopically	•			
Total number litters	1			
ALIMENTARY SYSTEM				
No Tissues/Organs Examined				
CARDIOVASCULAR SYSTEM				
No Tissues/Organs Examined				
ENDOCRINE SYSTEM				
No Tissues/Organs Examined				
GENERAL BODY SYSTEM				
No Tissues/Organs Examined				
GENITAL SYSTEM				
No Tissues/Organs Examined				
HEMATOLYMPHOID SYSTEM				
No Tissues/Organs Examined				
INTEGUMENTARY SYSTEM				
No Tissues/Organs Examined				
MUSCULOSKELETAL SYSTEM				
No Tissues/Organs Examined				
NERVOUS SYSTEM				
No Tissues/Organs Examined				

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

(0)

Test Type: MOG

KIDNEY

No Systemic Lesions

Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

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

Lab: RTI

(0)

	F1 Female: F1 Extra Fema	ales			
		Treatment Groups (ppm)			
	0	338	1125	3750	
RESPIRATORY SYSTEM No Tissues/Organs Examined					
SPECIAL SENSES SYSTEM No Tissues/Organs Examined					
URINARY SYSTEM					

(1)

(0)

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

Study Number: MOG08002B

Test Type: MOG

Route: Dosing in Feed

Tumor Summary Data for F1 Female F1 Extra Females	Treatment Groups (ppm)				
	0	338	1125	3750	
Total Animals with Primary Neoplasms	0	0	0	0	
Total Primary Neoplasms	0	0	0	0	
Total Animals with Benign Neoplasms	0	0	0	0	
Total Benign Neoplasms	0	0	0	0	
Total Animals with Malignant Neoplasms	0	0	0	0	
Total Malignant Neoplasms	0	0	0	0	
Total Animals with Metastatic Neoplasms	0	0	0	0	
Total Metastatic Neoplasms	0	0	0	0	
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0	

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Time Report Requested: 12:20:37
Lab: RTI

Date Report Requested: 08/27/2019

Species/Strain: Rat/Sprague-Dawley

F1 Male: PND28 Bio&MGWM Male

	Treatment Groups (ppm)				
	0	338	1125	3750	
Disposition Summary					
Animals Initially In Study	12	12	12	12	
Scheduled Sacrifice					
Early Deaths					
Scheduled Deaths Scheduled sacrifice, terminal (PND 28)	12	12	12	12	
Animals Examined Microscopically	12	12	1	3	
Total number litters			1	3	
ALIMENTARY SYSTEM					
No Tissues/Organs Examined					
CARDIOVASCULAR SYSTEM					
No Tissues/Organs Examined					
ENDOCRINE SYSTEM					
No Tissues/Organs Examined					
GENERAL BODY SYSTEM					
No Tissues/Organs Examined					
GENITAL SYSTEM					
EPIDIDYMIS	(0)	(0)	(0)	(3)	
TESTIS	(0)	(0)	(1)	(3)	
HEMATOLYMPHOID SYSTEM					
No Tissues/Organs Examined					
INTEGUMENTARY SYSTEM					
No Tissues/Organs Examined					
MUSCULOSKELETAL SYSTEM					
No Tissues/Organs Examined					

Test Type: MOG
Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

	Treatment (Groups (ppm)	
0	338	1125	3750

RESPIRATORY SYSTEM

No Tissues/Organs Examined

No Tissues/Organs Examined

SPECIAL SENSES SYSTEM

No Tissues/Organs Examined

URINARY SYSTEM

NERVOUS SYSTEM

No Tissues/Organs Examined

No Systemic Lesions

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Species/Strain: Rat/Sprague-Dawley

Study Number: MOG08002B

Test Type: MOG

Route: Dosing in Feed

Tumor Summary Data for F1 Male PND28 Bio&MGWM Male	Treatment Groups (ppm)			
	0	338	1125	3750
Total Animals with Primary Neoplasms	0	0	0	0
Total Primary Neoplasms	0	0	0	0
Total Animals with Benign Neoplasms	0	0	0	0
Total Benign Neoplasms	0	0	0	0
Total Animals with Malignant Neoplasms	0	0	0	0
Total Malignant Neoplasms	0	0	0	0
Total Animals with Metastatic Neoplasms	0	0	0	0
Total Metastatic Neoplasms	0	0	0	0
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0

Test Type: MOG

Route: Dosing in Feed

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Disposition Summary			Treatment Groups (ppm)			
Animals Initially In Study Animals Initially In Study Scheduled Sacrifice Early Deaths Unscheduled Sacrifice Unscheduled Sacrifice Scheduled Sacrifice Scheduled Sacrifice, terminal (PND 26 - 39) Scheduled Sacrifice, terminal (PND 26 - 39) 12 12 12 12 12 12 12 12 12 12 12 12 12 1		0	338	1125	3750	
Scheduled Sacrifice Early Deaths Unscheduled Sacrifice Scheduled Sacrifice Scheduled Deaths Scheduled Deaths Scheduled Deaths Scheduled Sacrifice, terminal (PND 26 - 39) 12 12 12 12 12 12 12 1	Disposition Summary					
Care	Animals Initially In Study	12	12	12	12	
Unscheduled Sacrifice Scheduled Sacrifice, terminal (PND 26 - 39) 12	Scheduled Sacrifice					
Scheduled Sacrifice, terminal (PND 26 - 39)						
Scheduled sacrifice, terminal (PND 26 - 39) 12 12 12 12 12 12 12 1	Unscheduled Sacrifice				1	
Animals Examined Microscopically 12						
Total number litters 12 11 9 12 ALIMENTARY SYSTEM No Tissues/Organs Examined SEASON OF TISSUES/ORGAN EXAMINED CARDIOVASCULAR SYSTEM No Tissues/Organs Examined SEASON ORGAN EXAMINED ENDOCRINE SYSTEM No Tissues/Organs Examined SEASON ORGAN EXAMINED GENITAL SYSTEM CERVIX (2) (0) (0) (0) OVARY (12) (12) (12) (12) OVIDUCT (0) (0) (0) (1) UTERUS (2) (0) (0) (0) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12) (12)					11	
ALIMENTARY SYSTEM No Tissues/Organs Examined CARDIOVASCULAR SYSTEM No Tissues/Organs Examined ENDOCRINE SYSTEM No Tissues/Organs Examined GENERAL BODY SYSTEM No Tissues/Organs Examined GENERAL SYSTEM CERVIX (2) (0) (0) (0) (0) (0) (0) (0) (0) (0) (0	Animals Examined Microscopically	12	12	12	12	
No Tissues/Organs Examined CARDIOVASCULAR SYSTEM No Tissues/Organs Examined ENDOCRINE SYSTEM No Tissues/Organs Examined GENERAL BODY SYSTEM No Tissues/Organs Examined GENERAL SYSTEM CERVIX CERVIX COVARY COVARY COVIDUCT COVID	Total number litters	12	11	9	12	
CARDIOVASCULAR SYSTEM No Tissues/Organs Examined ENDOCRINE SYSTEM No Tissues/Organs Examined GENERAL BODY SYSTEM No Tissues/Organs Examined GENITAL SYSTEM CERVIX CERVIX (2) (0) (0) (0) (0) OVARY (12) (12) (12) (12) (12) (12) (13) (14) UTERUS (2) (0) (0) (0) (1) (1)	ALIMENTARY SYSTEM					
No Tissues/Organs Examined ENDOCRINE SYSTEM No Tissues/Organs Examined GENERAL BODY SYSTEM No Tissues/Organs Examined GENITAL SYSTEM CERVIX CERVIX (2) (0) (0) (0) (0) (0) (0) (0)	No Tissues/Organs Examined					
ENDOCRINE SYSTEM No Tissues/Organs Examined GENERAL BODY SYSTEM No Tissues/Organs Examined GENITAL SYSTEM CERVIX OVARY OVIDUCT OUTERUS ENDOCRINE SYSTEM (2) (0) (0) (0) (0) (0) (0) (0) (1) (12) (12) (12) (12) (12) (13) (14) (15) (15) (16) (17) (17) (18) (18) (18) (18) (18) (18) (18) (18	CARDIOVASCULAR SYSTEM					
No Tissues/Organs Examined GENERAL BODY SYSTEM No Tissues/Organs Examined GENITAL SYSTEM CERVIX (2) (0) (0) (0) OVARY (12) (12) (12) (12) OVIDUCT (0) (0) (0) (1) UTERUS (2) (0) (0) (0) (1)	No Tissues/Organs Examined					
GENERAL BODY SYSTEM No Tissues/Organs Examined GENITAL SYSTEM CERVIX OVARY OVIDUCT UTERUS GENERAL BODY SYSTEM (2) (0) (0) (0) (0) (0) (0) (1) (1	ENDOCRINE SYSTEM					
No Tissues/Organs Examined GENITAL SYSTEM CERVIX (2) (0) (0) (0) OVARY (12) (12) (12) (12) (12) OVIDUCT (0) (0) (0) (1) UTERUS (2) (0) (0) (0) (1)	No Tissues/Organs Examined					
GENITAL SYSTEM CERVIX (2) (0) (0) (0) OVARY (12) (12) (12) (12) (12) OVIDUCT (0) (0) (0) (1) UTERUS (2) (0) (0) (0) (1)	GENERAL BODY SYSTEM					
CERVIX (2) (0) (0) (0) OVARY (12) (12) (12) (12) OVIDUCT (0) (0) (0) (1) UTERUS (2) (0) (0) (0) (1)	No Tissues/Organs Examined					
OVARY (12) (12) (12) (12) OVIDUCT (0) (0) (0) (1) UTERUS (2) (0) (0) (0) (1)	GENITAL SYSTEM					
OVARY (12) (12) (12) (12) OVIDUCT (0) (0) (0) (1) UTERUS (2) (0) (0) (0) (1)	CERVIX	(2)	(0)	(0)	(0)	
UTERUS (2) (0) (0) (1)	OVARY				(12)	
	OVIDUCT	(0)	(0)	(0)	(1)	
VAGINA (2) (0) (0) (1)	UTERUS	(2)	(0)	(0)	(1)	
	VAGINA	(2)	(0)	(0)	(1)	
	No Tissues/Organs Examined					

Test Type: MOG Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

	Treatment C	Groups (ppm)	
0	338	1125	3750

INTEGUMENTARY SYSTEM No Tissues/Organs Examined MUSCULOSKELETAL SYSTEM No Tissues/Organs Examined **NERVOUS SYSTEM** No Tissues/Organs Examined RESPIRATORY SYSTEM No Tissues/Organs Examined SPECIAL SENSES SYSTEM No Tissues/Organs Examined **URINARY SYSTEM** No Tissues/Organs Examined No Systemic Lesions

3

Study Number: MOG08002B

Test Type: MOG
Route: Dosing in Feed

Species/Strain: Rat/Sprague-Dawley

PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

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

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

Tumor Summary Data for F1 Female Bio&MGWM @ VO	Treatment Groups (ppm)				
	0	338	1125	3750	
Total Animals with Primary Neoplasms	0	0	0	0	
Total Primary Neoplasms	0	0	0	0	
Total Animals with Benign Neoplasms	0	0	0	0	
Total Benign Neoplasms	0	0	0	0	
Total Animals with Malignant Neoplasms	0	0	0	0	
Total Malignant Neoplasms	0	0	0	0	
Total Animals with Metastatic Neoplasms	0	0	0	0	
Total Metastatic Neoplasms	0	0	0	0	
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0	

Study Number: MOG08002B PA02R: Neoplastic Lesion Summary with Percent and Litter Incidence

Test Type: MOG

Route: Dosing in Feed

CAS Number: 1478-61-1

Species/Strain: Rat/Sprague-Dawley

Date Report Requested: 08/27/2019 Time Report Requested: 12:20:37

Lab: RTI

LEGEND

Number of animals examined given for each tissue. If none of the animals examined have the specific lesion then there is a blank for that dose group for that specific lesion.

Number of animals with observation reported with percent incidence in parentheses

Number of litters shown in square brackets for F1 and F2 animals

Phase day range of terminal sacrifice shown in parentheses in disposition summary

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

** END OF REPORT **