Experiment Number: 60311 - 01	P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]	Date Report Requested: 09/13/2016
Test Type: 14-DAY	Cobalt	Time Report Requested: 11:25:33
Route: RESPIRATORY EXPOSURE WHOLE BODY	CAS Number: 7440-48-4	First Dose M/F: 08/02/04 / 08/02/04
Species/Strain: RATS/F 344/N		Lab: BNW
NTP Study Number: C603	11	

Lock Date:	11/29/2005
Cage Range:	ALL
Date Range:	ALL
Reasons For Removal:	ALL
Removal Date Range:	ALL
Treatment Groups:	Include ALL
Study Gender:	Both
TDMSE Version:	3.0.2.3_002
PWG Approval Date:	NONE

Experiment Number: 60311 - 01	P18: INCIDENCE RATI	ES OF NON-NEOPLAS AVERAGE SEVE	TH Date Report Requested: 09/13/2016			
Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N			Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW			
FISCHER 344 RATS MALE	CONTROL	2.5 MG/M3	5 MG/M3	10 MG/M3	20 MG/M3	40 MG/M3
Disposition Summary						
Animals Initially In Study Early Deaths Moribund Sacrifice	5	5	5	5	5	5
Natural Death Survivors					4	5
Terminal Sacrifice Animals Examined Microscopically	5 5	5 5	5 5	5 5	5	5
ALIMENTARY SYSTEM						
Liver	(5)	(0)	(0)	(0)	(5)	(5)
CARDIOVASCULAR SYSTEM		·				
None						
ENDOCRINE SYSTEM						
Thyroid Gland	(5)	(0)	(0)	(0)	(5)	(5)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Testes	(0)	(0)	(0)	(0)	(0)	(1)
HEMATOPOIETIC SYSTEM						
Lymph Node	(0)	(0)	(0)	(0)	(0)	(1)

Experiment Number: 60311 - 01	P18: INCIDENCE RAT	Date Report Requested: 09/13/2016				
Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N		AVERAGE SEVERITY GRADES[b] Cobalt CAS Number: 7440-48-4				
FISCHER 344 RATS MALE	CONTROL	2.5 MG/M3	5 MG/M3	10 MG/M3	20 MG/M3	40 MG/M3
Lymph Node, Bronchial Lymph Node, Mediastinal	(0) (2)	(0) (0)	(0) (0)	(0) (2)	(0) (0)	(1) (0)
INTEGUMENTARY SYSTEM						
None						
MUSCULOSKELETAL SYSTEM						
None						
NERVOUS SYSTEM						
Brain Hemorrhage	(5)	(0)	(0)	(5)	(5)	(5) 1 [1.0]
RESPIRATORY SYSTEM						
Lung Hemorrhage Inflammation, Acute Alveolar Epithelium, Hyperplasia	(5)	(5)	(5)	(5) 1 [1.0]	(5) 5 [1.2] 4 [1.3] 3 [1.7]	(5) 5 [3.0] 5 [2.0] 5 [1.4]
Alveolus, Infiltration Cellular, Histiocyte Bronchiole, Epithelium, Necrosis			4 [1.0]	3 [1.3]	5 [2.0] 2 [1.0]	5 [1.2] 3 [1.0]
Bronchiole, Epithelium, Vacuolization Cytoplasmic		5 [1.2]	5 [1.6]	5 [2.0]	1 [2.0]	
Interstitium, Fibrosis Nose Foreign Body	(5)	(5)	(5)	5 [1.2] (5) 1	2 [3.0] (5)	(5)
Olfactory Epithelium, Atrophy Olfactory Epithelium, Necrosis Respiratory Epithelium, Metaplasia, Squamou	IS	1 [1.0] 5 [1.6] 3 [1.0]	5 [1.8] 4 [1.3]	1 [1.0] 5 [2.4] 4 [1.0] 1 [1.0]	3 [1.7] 4 [2.8] 2 [1.0]	3 [1.7] 5 [3.0] 1 [1.0]
Respiratory Epithelium, Necrosis a - Number of animals examined microscopic		of animals with lesion	n	1 [1.0]	3 [1.3]	5 [1.4]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 60311 - 01	P18: INCIDENCE RATI	18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]				ested: 09/13/2016	
Test Type: 14-DAY		Col	balt		Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04		
Route: RESPIRATORY EXPOSURE WHOLE BODY		CAS Numbe	er: 7440-48-4				
Species/Strain: RATS/F 344/N					Lab: BNW		
FISCHER 344 RATS MALE	CONTROL	2.5 MG/M3	5 MG/M3	10 MG/M3	20 MG/M3	40 MG/M3	
SPECIAL SENSES SYSTEM							
None							
URINARY SYSTEM							
Kidney Urinary Bladder Muscularis, Serosa, Edema	(5) (5)	(0) (0)	(0) (0)	(0) (5)	(5) (5) 1 [3.0]	(5) (5)	

*** END OF MALE ***

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 60311 - 01	P18: INCIDENCE RATE	ES OF NON-NEOPLAS AVERAGE SEVE	H Date Report Requested: 09/13/2016			
Test Type: 14-DAY		Cobalt				
Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N		CAS Numbe	r: 7440-48-4		Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW	
FISCHER 344 RATS FEMALE	CONTROL	2.5 MG/M3	5 MG/M3	10 MG/M3	20 MG/M3	40 MG/M3
Disposition Summary						
Animals Initially In Study Early Deaths Natural Death	5	5	5	5	5 3	5 5
Survivors Terminal Sacrifice Animals Examined Microscopically	5 5	5 5	5 5	5 5	2 5	5
ALIMENTARY SYSTEM						
Liver	(5)	(0)	(0)	(0)	(5)	(5)
CARDIOVASCULAR SYSTEM						
None						
ENDOCRINE SYSTEM						
Thyroid Gland	(5)	(0)	(0)	(0)	(5)	(4)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM		·				
None						
HEMATOPOIETIC SYSTEM						
Lymph Node	(0)	(0)	(1)	(0)	(0)	(0)

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

	AVERAGE SEVE	Date Report Requested: 09/13/2016			
	Time Report Requested: 11:25:33				
	CAS Numbe	r: 7440-48-4		First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW	
CONTROL	2.5 MG/M3	5 MG/M3	10 MG/M3	20 MG/M3	40 MG/M3
			,,		
(5)	(0)	(0)	(5)	(5)	(5)
				2 [2.0]	2 [2.0]
(5)	(5)	(5)	(5)	(5)	(5)
			()		5 [2.8]
					5 [1.4]
					2 [1.0]
					5 [1.8]
	1 [1 0]	1 [1 0]	4 [1 0]		3 [1.0]
	4 [1.0]	5 [1.0]	5 [1.8]	3 [1.7]	0[1.0]
			4 [1.0]	3 [3.0]	
(5)	(5)	(5)			(5)
\-/	X - 7	x - 7	× /	1	<u> </u>
					1 [1.0]
	5 [1.8]	5 [2.0]	5 [2.0]	4 [2.8]	1 [2.0]
	- []	- [-]	- [0]		1 [1.0]
	5 [1.0]	3 [1.0]	5 [1.0]		5 [3.0]
	0[1.0]				0 [0:0]
IS		. [2:0]	- [0]		
					5 [1.4]
(0)	(0)	(0)	(0)		(2)
-		CAS Number CONTROL 2.5 MG/M3 (5) (0) (5) (5) 1 [1.0] 4 [1.0] 4 [1.0] 5 [1.8] 5 [1.0] US	(5) (0) (0) $(5) (5) (5) (5) (5) (5) (5) (5)$	CAS Number: 7440-48-4 CONTROL 2.5 MG/M3 5 MG/M3 10 MG/M3 (5) (0) (0) (5) (5) (0) (0) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (6) (5) (5) (5) (6) (5) (5) (5) (7) (7)	CAS Number: 7440-48-4 First Dose M/F: 03 Lab: ENW CONTROL 2.5 MG/M3 5 MG/M3 10 MG/M3 20 MG/M3 (5) (0) (0) (5) (5) (6) 2[2.0] (6) (5) (5) (5) (5) (5) (5) (2.0) (6) (5) (5) (5) (5) (5) (2.0) (6) (5) (5) (5) (5) (5) (2.0) (6) (5) (5) (5) (5) (5) (2.0) (5) (5) (5) (5) (5) (5) (2.0) (6) (5) (5) (5) (5) (5) (2.0) (6) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (6) (7) (7) (6) (5) (6) (5) (6) (6) (7) (7) (5)

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 60311 - 01	P18: INCIDENCE RATI	ES OF NON-NEOPLAS AVERAGE SEVE	Date Report Requested: 09/13/2016				
Test Type: 14-DAY		Cobalt					
Route: RESPIRATORY EXPOSURE WHOLE BODY		CAS Numbe	r: 7440-48-4		Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04		
Species/Strain: RATS/F 344/N							
FISCHER 344 RATS FEMALE	CONTROL	2.5 MG/M3	5 MG/M3	10 MG/M3	20 MG/M3	40 MG/M3	
SPECIAL SENSES SYSTEM							
None							
URINARY SYSTEM				· · · · · · · · · · · · · · · · · · ·			
Kidney	(5)	(0)	(0)	(0)	(5)	(5)	
Urinary Bladder	(0)	(0)	(0)	(0)	(0)	(2)	

*** END OF REPORT ***

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)