

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:29
First Dose M/F: NA / NA
Lab: MBA

C Number:	C97003C
Lock Date:	10/27/2000
Cage Range:	All
Date Range:	All
Reasons For Removal:	All
Removal Date Range:	All
Treatment Groups:	All
Study Gender:	Both
PWG Approval Date	NONE

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**F 344/N Rat Male
 VEHICLE CONTROL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1	0
	1	2	3	4	5	6	7	8	9		
	*TOTALS										

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	M	+	+	+	+	M	+	+	8

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue

M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically

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 Lab: MBA

**F 344/N Rat Male
 VEHICLE CONTROL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1	0
	1	2	3	4	5	6	7	8	9	0	

*TOTALS

Pituitary Gland	+	+	+	M	+	+	+	+	+	+	9
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
General Body System											
NONE											
Genital System											
Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10
Hematopoietic System											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
Integumentary System											
Mammary Gland	M	+	M	M	M	+	+	+	M	M	4
Skin	+	I	+	+	+	+	+	+	+	+	9
Musculoskeletal System											

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Time Report Requested: 15:49:30

First Dose M/F: NA / NA

Lab: MBA

**F 344/N Rat Male
VEHICLE CONTROL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
Bone	+	+	+	+	+	+	+	+	+	+	10
Nervous System											
Brain	+	+	+	+	+	+	+	+	+	+	10
Respiratory System											
Lung	+	+	+	+	+	+	+	+	+	+	10
Alveolar/Bronchiolar Adenoma									X		1
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
Special Senses System											
Eye	+	+	+	+	+	+	+	+	+	+	10
Urinary System											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10
SYSTEMIC LESIONS											
Multiple Organ	+	+	+	+	+	+	+	+	+	+	10

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 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:30
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
 0.2 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

Skin + + + + + + + + + +

10

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

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BLANK ..Not examined microscopically

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Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:30
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
 0.6 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	3
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

Skin + + + + + + + + + +

10

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

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M ..Missing tissue

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BLANK ..Not examined microscopically

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Date Report Requested: 10/16/2014

Time Report Requested: 15:49:30

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
0.6 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	3
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	10
----------------	---	---	---	---	---	---	---	---	---	---	----

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CAS Number: 35691-65-7

Date Report Requested: 10/16/2014

Time Report Requested: 15:49:30

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
2.0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	3	3	3	3	3	3	3	3	3	4
	1	2	3	4	5	6	7	8	9	0

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

Skin + + + + + + + + + +

10

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

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BLANK ..Not examined microscopically

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 Route: SKIN APPLICATION
 Species/Strain: Rat/F 344/N

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 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:30
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
 6.0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	5
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver + + 2

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

Skin + + + + + + + + + + 10
 Skin, Control + 1

Musculoskeletal System

NONE

Nervous System

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 Lab: MBA

F 344/N Rat Male
 6.0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	5
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

NONE
Respiratory System

NONE
Special Senses System

Eye + 1
Urinary System

NONE
SYSTEMIC LESIONS

Multiple Organ + + + + + + + + + + 10

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 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:30
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
 18.0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	5	5	5	5	5	5	5	5	5	6	
	1	2	3	4	5	6	7	8	9	0	
	*TOTALS										

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	M	+	M	8
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	M	+	+	+	+	+	+	+	+	9

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
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First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
18.0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	5	5	5	5	5	5	5	5	5	6	
	1	2	3	4	5	6	7	8	9	0	*TOTALS
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
General Body System											
NONE											
Genital System											
Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	M	+	M	+	+	+	+	+	8
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10
Hematopoietic System											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node				+							1
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
Integumentary System											
Mammary Gland	M	+	M	+	M	+	M	+	M	M	4
Skin	+	+	+	+	+	+	+	+	+	+	10
Skin, Control						+		+	+	+	4

* ..Total animals with tissue examined microscopically; Total animals with tumor

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 Lab: MBA

F 344/N Rat Male
18.0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	5	5	5	5	5	5	5	5	5	6	
	1	2	3	4	5	6	7	8	9	0	*TOTALS
Skin, Control						+		+	+	+	4
Musculoskeletal System											
Bone	+	+	+	+	+	+	+	+	+	+	10
Nervous System											
Brain	+	+	+	+	+	+	+	+	+	+	10
Respiratory System											
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
Special Senses System											
Eye	+	+	+	+	+	+	+	+	+	+	10
Urinary System											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10
SYSTEMIC LESIONS											
Multiple Organ	+	+	+	+	+	+	+	+	+	+	10

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue

M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:30
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
CONTROL SPECIAL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:30
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
CONTROL SPECIAL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:30
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
0.2MG/KGSPECIAL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:30
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
0.2MG/KGSPECIAL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:30
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
0.6MG/KGSPECIAL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:30
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
0.6MG/KGSPECIAL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:30
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
2.0MG/KGSPECIAL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:30
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
2.0MG/KGSPECIAL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:30
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
6.0MG/KGSPECIAL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:30
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
6.0MG/KGSPECIAL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:30
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
18MG/KG SPECIAL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:30
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
18MG/KG SPECIAL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

END OF MALE DATA

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
 Test Type: 90-DAY
 Route: SKIN APPLICATION
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dibromo-2,4-dicyanobutane
 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:30
 First Dose M/F: NA / NA
 Lab: MBA

**F 344/N Rat Female
 VEHICLE CONTROL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	6	6	6	6	6	6	6	6	6	7	7
	1	2	3	4	5	6	7	8	9	0	0
	*TOTALS										

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	A	+	+	+	+	9
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	A	+	+	+	+	9
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	A	+	+	+	+	9
Intestine Small, Jejunum	+	+	+	+	+	A	+	+	+	+	9
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue

M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically

Experiment Number: 97003-05

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dibromo-2,4-dicyanobutane

CAS Number: 35691-65-7

Date Report Requested: 10/16/2014

Time Report Requested: 15:49:30

First Dose M/F: NA / NA

Lab: MBA

**F 344/N Rat Female
VEHICLE CONTROL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	6	6	6	6	6	6	6	6	6	7	
	1	2	3	4	5	6	7	8	9	0	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
General Body System											
NONE											
Genital System											
Clitoral Gland	M	+	+	+	+	+	+	+	M	+	8
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10
Hematopoietic System											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	M	M	+	M	M	M	M	M	M	M	1
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
Integumentary System											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
Musculoskeletal System											
Bone	+	+	+	+	+	+	+	+	+	+	10

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 97003-05
 Test Type: 90-DAY
 Route: SKIN APPLICATION
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dibromo-2,4-dicyanobutane
 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:30
 First Dose M/F: NA / NA
 Lab: MBA

**F 344/N Rat Female
 VEHICLE CONTROL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	6	6	6	6	6	6	6	6	6	7
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Nervous System

Brain + + + + + + + + + + 10

Respiratory System

Lung + + + + + + + + + + 10

Nose + + + + + + + + + + 10

Trachea + + + + + + + + + + 10

Special Senses System

Eye + + + + + + + + + + 10

Urinary System

Kidney + + + + + + + + + + 10

Urinary Bladder + + + + + + + + + + 10

SYSTEMIC LESIONS

Multiple Organ + + + + + + + + + + 10

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue

M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically

Experiment Number: 97003-05
 Test Type: 90-DAY
 Route: SKIN APPLICATION
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dibromo-2,4-dicyanobutane
 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:30
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Female
 0.2 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	7	8	
	1	2	3	4	5	6	7	8	9	0	
	*TOTALS										

Alimentary System

Mesentery + 1

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Lymph Node + + 2

Integumentary System

Skin + + + + + + + + + + 10

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 97003-05
 Test Type: 90-DAY
 Route: SKIN APPLICATION
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dibromo-2,4-dicyanobutane
 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:31
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Female
0.6 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	8	8	8	8	8	8	8	8	8	8	9
	1	2	3	4	5	6	7	8	8	9	0
	*TOTALS										

Alimentary System

Liver + + 2

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

Skin + + + + + + + + + + 10

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 97003-05

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dibromo-2,4-dicyanobutane

CAS Number: 35691-65-7

Date Report Requested: 10/16/2014

Time Report Requested: 15:49:31

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Female
0.6 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	8	8	8	8	8	8	8	8	9	9
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	10
----------------	---	---	---	---	---	---	---	---	---	---	----

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 97003-05
 Test Type: 90-DAY
 Route: SKIN APPLICATION
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dibromo-2,4-dicyanobutane
 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:31
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Female
 2.0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	1	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1	
	9	9	9	9	9	9	9	9	9	0	
	1	2	3	4	5	6	7	8	9	0	
	*TOTALS										

Alimentary System

Esophagus	+	1
Intestine Large, Cecum	A	0
Intestine Large, Colon	A	0
Intestine Large, Rectum	A	0
Intestine Small, Duodenum	A	0
Intestine Small, Ileum	A	0
Intestine Small, Jejunum	A	0
Liver	+	1
Pancreas	A	0
Salivary Glands	A	0
Stomach, Forestomach	+	1
Stomach, Glandular	+	1

Cardiovascular System

Blood Vessel	+	1
Heart	+	1

Endocrine System

Adrenal Cortex	+	1
Adrenal Medulla	+	1
Islets, Pancreatic	A	0
Parathyroid Gland	+	1

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue

M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically

Experiment Number: 97003-05

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dibromo-2,4-dicyanobutane

CAS Number: 35691-65-7

Date Report Requested: 10/16/2014

Time Report Requested: 15:49:31

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Female
2.0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	1	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1	0
	9	9	9	9	9	9	9	9	9	0	0
	1	2	3	4	5	6	7	8	9	0	0
	*TOTALS										

Pituitary Gland	A	0
Thyroid Gland	A	0

General Body System

NONE

Genital System

Clitoral Gland	A	0
Ovary	A	0
Uterus	A	0

Hematopoietic System

Bone Marrow	A	0
Lymph Node	+	1
Lymph Node, Mandibular	M	0
Lymph Node, Mesenteric	A	0
Spleen	A	0
Thymus	A	0

Integumentary System

Mammary Gland	+	1
Skin	+ + + + + + + + + +	10

Musculoskeletal System

Bone	+	1
------	---	---

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 97003-05
 Test Type: 90-DAY
 Route: SKIN APPLICATION
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dibromo-2,4-dicyanobutane
 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:31
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Female
 2.0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	1	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1	
	9	9	9	9	9	9	9	9	9	0	
	1	2	3	4	5	6	7	8	9	0	
	*TOTALS										

Nervous System

Brain + 1

Respiratory System

Lung + 1

Nose + 1

Trachea A 0

Special Senses System

Eye A 0

Urinary System

Kidney + 1

Urinary Bladder + 1

SYSTEMIC LESIONS

Multiple Organ + + + + + + + + + + 10

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue

M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically

Experiment Number: 97003-05
 Test Type: 90-DAY
 Route: SKIN APPLICATION
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dibromo-2,4-dicyanobutane
 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:31
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Female
 6.0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0	
	*TOTALS										

Alimentary System

Mesentery + 1

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

Ovary + 1

Hematopoietic System

Lymph Node + 1

Integumentary System

Skin + + + + + + + + + + 10

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue

M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically

Experiment Number: 97003-05
 Test Type: 90-DAY
 Route: SKIN APPLICATION
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dibromo-2,4-dicyanobutane
 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:31
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Female
 18.0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	9	0
	*TOTALS										

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	M	+	+	+	+	+	+	+	9
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	M	+	+	M	+	+	+	8

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue

M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically

Experiment Number: 97003-05
 Test Type: 90-DAY
 Route: SKIN APPLICATION
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dibromo-2,4-dicyanobutane
 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:31
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Female
 18.0 MG/KG

	DAY ON TEST										*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	1	2	3	4	5	6	7	8	9	0	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	M	+	+	+	9
General Body System											
NONE											
Genital System											
Clitoral Gland	+	+	M	M	+	+	+	+	M	+	7
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10
Hematopoietic System											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	M	M	M	M	M	M	+	M	+	M	2
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
Integumentary System											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
Skin, Control		+									1
Musculoskeletal System											
Bone	+	+	+	+	+	+	+	+	+	+	10

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue

M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically

Experiment Number: 97003-05
 Test Type: 90-DAY
 Route: SKIN APPLICATION
 Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: 1,2-Dibromo-2,4-dicyanobutane
 CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
 Time Report Requested: 15:49:31
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Female
18.0 MG/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	0	
	*TOTALS										

Nervous System

Brain + + + + + + + + + + 10

Respiratory System

Lung + + + + + + + + + + 10

Nose + + + + + + + + + + 10

Trachea + + + + + + + + + + 10

Special Senses System

Eye + + + + + + + + + + 10

Urinary System

Kidney + + + + + + + + + + 10

Urinary Bladder + + + + + + + + + + 10

SYSTEMIC LESIONS

Multiple Organ + + + + + + + + + + 10

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue

M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:31
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Female
CONTROL SPECIAL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:31
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Female
CONTROL SPECIAL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:31
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Female
0.2MG/KGSPECIAL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:31
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Female
0.2MG/KGSPECIAL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:31
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Female
0.6MG/KGSPECIAL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 97003-05

Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: 1,2-Dibromo-2,4-dicyanobutane

CAS Number: 35691-65-7

Date Report Requested: 10/16/2014

Time Report Requested: 15:49:31

First Dose M/F: NA / NA

Lab: MBA

DAY ON TEST

F 344/N Rat Female
0.6MG/KGSPECIAL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:31
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Female
2.0MG/KGSPECIAL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:31
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Female
2.0MG/KGSPECIAL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:31
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Female
6.0MG/KGSPECIAL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:31
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Female
6.0MG/KGSPECIAL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:31
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Female
18MG/KG SPECIAL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

Experiment Number: 97003-05
Test Type: 90-DAY
Route: SKIN APPLICATION
Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: 1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Requested: 10/16/2014
Time Report Requested: 15:49:31
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Female
18MG/KG SPECIAL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

**** END OF REPORT ****

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically