Experiment Number: 88148-01
Test Type: 14-DAY
Route: GAVAGE
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 3,3',4,4'-Tetrachloroazobenzene
CAS Number: 14047-09-7

Date Report Requested: 10/20/2014
Time Report Requested: 07:45:17
First Dose M/F: NA / NA
Lab: MBA

C Number: C88148
Lock Date: 01/19/1994
Cage Range: All
Date Range: All
Reasons For Removal: All
Removal Date Range: All
Treatment Groups: All
Study Gender: Both
PWG Approval Date: NONE
**Experiment Number:** 88148-01  
**Test Type:** 14-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N  

**Test Compound:** 3,3',4,4'-Tetrachloroazobenzene  
**CAS Number:** 14047-09-7  
**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 07:45:17  
**First Dose M/F:** NA / NA  
**Lab:** MBA  

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**Alimentary System**  
- Liver: + + + + + 5  
- Stomach, Foregut: + + + + + 5  
- Stomach, Glandular: + + + + + 5  

**Cardiovascular System**  
NONE  

**Endocrine System**  
NONE  

**General Body System**  
NONE  

**Genital System**  
NONE  

**Hematopoietic System**  
- Lymph Node, Mesenteric: + + + + + 5  
- Spleen: + + + + + 5  
- Thymus: + + + + + 5  

**Integumentary System**  
NONE  

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ ..Tissue examined microscopically  
M ..Missing tissue  
X ..Lesion present  
A ..Autolysis precludes evaluation  
I ..Insufficient tissue  
BLANK ..Not examined microscopically  
1-4 ..Lesion qualified as:  
1) Minimal  2) Mild  3) Moderate  4) Marked
Experiment Number: 88148-01
Test Type: 14-DAY
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 3,3’,4,4’-Tetrachloroazobenzene
CAS Number: 14047-09-7

Date Report Requested: 10/20/2014
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Lab: MBA

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*TOTALS

Musculoskeletal System
NONE

Nervous System
NONE

Respiratory System
NONE

Special Senses System
NONE

Urinary System

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M ..Missing tissue
1-4 ..Lesion qualified as:
X ..Lesion present
A ..Autolysis precludes evaluation
1) Minimal 3) Moderate
I ..Insufficient tissue
BLANK ..Not examined microscopically
2) Mild 4) Marked

Page 3
**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** 3,3',4,4'-Tetrachloroazobenzene  
**CAS Number:** 14047-09-7

**Experiment Number:** 88148-01  
**Test Type:** 14-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

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**ALIMENTARY SYSTEM**

NONE

**CARDIOVASCULAR SYSTEM**

NONE

**ENDOCRINE SYSTEM**

NONE

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

NONE

**HEMATOPOIETIC SYSTEM**

- **Spleen**
  + + + + + 5

- **Hematopoietic Cell Proliferation**
  1 1 1 1 4 1.0

**INTEGUMENTARY SYSTEM**

NONE

**MUSCULOSKELETAL SYSTEM**

NONE

**NERVOUS SYSTEM**


*..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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X..Lesion present
A..Autolysis precludes evaluation
I..Insufficient tissue
BLANK..Not examined microscopically

1-4..Lesion qualified as:
1) Minimal 2) Mild
3) Moderate 4) Marked
**Experiment Number:** 88148-01  
**Test Type:** 14-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

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### F 344/N Rat Male

**12.5 MG/KG**

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**TOTALS**

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X ..Lesion present
A ..Autolysis precludes evaluation
1) Minimal 2) Mild
I ..Insufficient tissue
BLANK ..Not examined microscopically
3) Moderate 4) Marked

Page 5
Experiment Number: 88148-01
Test Type: 14-DAY
Route: GAVAGE
Species/Strain: Rat/F 344/N

Test Compound: 3,3',4,4'-Tetrachloroazobenzene
CAS Number: 14047-09-7

Date Report Requested: 10/20/2014
Time Report Requested: 07:45:17
First Dose M/F: NA / NA
Lab: MBA

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

F 344/N Rat Male
32 MG/KG

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*TOTALS

Alimentary System
NONE

Cardiovascular System
NONE

Endocrine System
NONE

General Body System
NONE

Genital System
NONE

Hematopoietic System

Spleen + + + + + 5
Hematopoietic Cell Proliferation 1 1 2 1 1 5 1.2

Integumentary System
NONE

Musculoskeletal System
NONE

Nervous System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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A ..Autolysis precludes evaluation
1-4 ..Lesion qualified as:
1) Minimal  3) Moderate
2) Mild     4) Marked
I ..Insufficient tissue
BLANK ..Not examined microscopically
Experiment Number: 88148-01
Test Type: 14-DAY
Route: GAVAGE
Species/Strain: Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Test Compound: 3,3',4,4'-Tetrachloroazobenzene
CAS Number: 14047-09-7

Date Report Requested: 10/20/2014
Time Report Requested: 07:45:17
First Dose M/F: NA / NA
Lab: MBA

**F 344/N Rat Male**
**32 MG/KG**

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*TOTALS*

NONE

Respiratory System
NONE

Special Senses System
NONE

Urinary System

Kidney

Nephropathy, Chronic

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I..Insufficient tissue
BLANK..Not examined microscopically

1-4..Lesion qualified as:
1) Minimal
2) Mild
3) Moderate
4) Marked
Experiment Number: 88148-01
Test Type: 14-DAY
Route: GAVAGE
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: 3,3',4,4'-Tetrachloroazobenzene
CAS Number: 14047-09-7

Date Report Requested: 10/20/2014
Time Report Requested: 07:45:17
First Dose M/F: NA / NA
Lab: MBA

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F 344/N Rat Male
80 MG/KG

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*TOTALS

## Alimentary System
NONE

## Cardiovascular System
NONE

## Endocrine System
NONE

## General Body System
NONE

## Genital System
NONE

## Hematopoietic System
Spleen

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Hematopoietic Cell Proliferation

|                | 2 | 1 | 2 | 1 | 2 | 5 | 1.6 |

## Integumentary System
NONE

## Musculoskeletal System
NONE

## Nervous System
NONE

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M ..Missing tissue
X ..Lesion present
A ..Autolysis precludes evaluation
I ..Insufficient tissue
BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:
1) Minimal
2) Mild
3) Moderate
4) Marked
### Non-neoplastic Lesions by Individual Animal

**Test Compound:** 3,3’,4,4’-Tetrachloroazobenzene  
**CAS Number:** 14047-09-7

**Experiment Number:** 88148-01  
**Test Type:** 14-DAY  
**Route:** Gavage  
**Species/Strain:** Rat/F 344/N  
**Date Report Requested:** 10/20/2014  
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**First Dose M/F:** NA / NA  
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**Respiratory System**  
- NONE

**Special Senses System**  
- NONE

**Urinary System**

- **Kidney**
  - Nephropathy, Chronic
    - 1 1 1 3 1.0
  - Renal Tubule, Accumulation, Hyaline Droplet
    - 1 1 2 1.0

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  2) Mild
  3) Moderate
  4) Marked

Page 9
Experiment Number: 88148-01
Test Type: 14-DAY
Route: GAVAGE
Species/Strain: Rat/F 344/N

Date Report Requested: 10/20/2014
Time Report Requested: 07:45:17
First Dose M/F: NA / NA
Lab: MBA

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Test Compound: 3,3',4,4'-Tetrachloroazobenzene
CAS Number: 14047-09-7

**F 344/N Rat Male**
200 MG/KG

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**TOTALES**

**Alimentary System**
Liver + 1
Hepatodiaphragmatic Nodule 2 1 2.0

**Cardiovascular System**
NONE

**Endocrine System**
NONE

**General Body System**
NONE

**Genital System**
NONE

**Hematopoietic System**
Spleen + + + + + 5
Hematopoietic Cell Proliferation 2 2 2 2 2 5 2.0

**Integumentary System**
NONE

**Musculoskeletal System**
NONE

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Test Type: 14-DAY
Route: GAVAGE
Species/Strain: Rat/F 344/N

Test Compound: 3,3',4,4'-Tetrachloroazobenzene
CAS Number: 14047-09-7

Date Report Requested: 10/20/2014
Time Report Requested: 07:45:17
First Dose M/F: NA / NA
Lab: MBA

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

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**ANIMAL ID**

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*TOTALS*

**Nervous System**

NONE

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

Kidney

| + | + | + | + | 5 |

Nephropathy, Chronic

| 1 | 1 | 1 | 3 | 1.0 |

Renal Tubule, Accumulation, Hyaline Droplet

| 1 | 1 | 1 | 1.0 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ ..Tissue examined microscopically
M ..Missing tissue
1-4 ..Lesion qualified as:
1) Minimal   3) Moderate
2) Mild      4) Marked
**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** 3,3',4,4'-Tetrachloroazobenzene  
**CAS Number:** 14047-09-7

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**F 344/N Rat Male**  
**500 MG/KG**

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**Alimentary System**

- Liver: + + + + + 5
- Stomach, Foregut: + + + + + 5
- Stomach, glandular: + + + + + 5

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

- Lymph node, mesenteric: + + + + + 5
- Spleen: + + + + + 5
- Hematopoietic cell proliferation: 2 2 2 2 2 5 2.0
- Thymus: + + + + + 5
- Hemorrhage: 1 1 2 1.0

**Integumentary System**

---

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ ..Tissue examined microscopically
M ..Missing tissue 1-4 ..Lesion qualified as:
X ..Lesion present  A ..Autolysis precludes evaluation
I ..Insufficient tissue  B ..Not examined microscopically  1) Minimal  4) Marked
I ..Insufficient tissue  2) Mild  4) Marked
Experiment Number: 88148-01
Test Type: 14-DAY
Route: GAVAGE
Species/Strain: Rat/F 344/N

Test Compound: 3,3',4,4'-Tetrachloroazobenzene
CAS Number: 14047-09-7

Date Report Requested: 10/20/2014
Time Report Requested: 07:45:17
First Dose M/F: NA / NA
Lab: MBA

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

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F 344/N Rat Male
500 MG/KG

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*TOTALS*

**NONE**

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

Kidney + + + + + 5
Nephropathy, Chronic 1 1 1 1 4 1.0
Renal Tubule, Accumulation, Hyaline Droplet 2 2 1 2 1 5 1.6

***END OF MALE DATA***

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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M ..Missing tissue
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BLANK ..Not examined microscopically
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CAS Number: 14047-09-7

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Lab: MBA

F 344/N Rat Female
0 MG/KG

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**TOTALS**

### Alimentary System
- **Liver**: + + + + + 5
- **Stomach, Forestomach**: + + + + + 5
- **Stomach, Glandular**: + + + + + 5

### Cardiovascular System
- NONE

### Endocrine System
- NONE

### General Body System
- NONE

### Genital System
- NONE

### Hematopoietic System
- **Lymph Node, Mesenteric**: + + + + + 5
- **Spleen**: + + + + + 5
- **Thymus**: + + + + + 5
- **Hemorrhage**: 1 1 1.0

### Integumentary System
- NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ ..Tissue examined microscopically
M ..Missing tissue
X ..Lesion present
A ..Autolysis precludes evaluation
I ..Insufficient tissue
BLANK ..Not examined microscopically
1-4 ..Lesion qualified as:
1) Minimal  3) Moderate
2) Mild      4) Marked
**Experiment Number:** 88148-01  
**Test Type:** 14-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

---

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** 3,3',4,4'-Tetrachloroazobenzene  
**CAS Number:** 14047-09-7

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**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 07:45:17

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**Lab:** MBA  
**First Dose M/F:** NA / NA

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**F 344/N Rat Female**  
**0 MG/KG**

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**Musculoskeletal System**  
**NONE**  

**Nervous System**  
**NONE**  

**Respiratory System**  
**NONE**  

**Special Senses System**  
**NONE**  

**Urinary System**

- **Kidney**
  - + + + + + 5
- **Mineralization**
  - 2 1 2 1.5
- **Nephropathy, Chronic**
  - 1 1 1 1 4 1.0

---

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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  M ..Missing tissue
  X ..Lesion present
  A ..Autolysis precludes evaluation
  I ..Insufficient tissue
  BLANK ..Not examined microscopically
  1..Lesion qualified as:
  1) Minimal  2) Mild  3) Moderate  4) Marked

---

Page 15
P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: 3,3',4,4'-Tetrachloroazobenzene
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First Dose M/F: NA / NA
Lab: MBA

F 344/N Rat Female
12.5 MG/KG

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*TOTALS

Alimentary System

Liver + 1
Hepatodiaphragmatic Nodule 1 1 1.0

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Liver + + + + + 5
Hematopoietic Cell Proliferation 1 1 1.0

Integumentary System

NONE

Musculoskeletal System

NONE

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*TOTALS

### Nervous System
- NONE

### Respiratory System
- NONE

### Special Senses System
- NONE

### Urinary System
- NONE

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F 344/N Rat Female  
32 MG/KG  

| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 4 | 1 | 2 | 3 | 4 | 5 |

*TOTALS

**Alimentary System**  
NONE

**Cardiovascular System**  
NONE

**Endocrine System**  
NONE

**General Body System**  
NONE

**Genital System**  
NONE

**Hematopoietic System**  
Spleen  
+ + + + + 5

Hematopoietic Cell Proliferation  
1 1 1 1 4 1.0

**Integumentary System**  
NONE

**Musculoskeletal System**  
NONE

**Nervous System**  

---

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: 3,3',4,4'-Tetrachloroazobenzene
CAS Number: 14047-09-7

Date Report Requested: 10/20/2014
Time Report Requested: 07:45:17
First Dose M/F: NA / NA
Lab: MBA

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**F 344/N Rat Female**
**32 MG/KG**

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*TOTALS*

NONE

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Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

---

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**F 344/N Rat Female**  
**80 MG/KG**

**Alimentary System**
- NONE

**Cardiovascular System**
- NONE

**Endocrine System**
- NONE

**General Body System**
- NONE

**Genital System**
- NONE

**Hematopoietic System**
- Spleen: + + + + + 5
- Hematopoietic Cell Proliferation: 1 1 1 1 1 5 1.0

**Integumentary System**
- NONE

**Musculoskeletal System**
- NONE

**Nervous System**
- NONE

---

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ ..Tissue examined microscopically  
M ..Missing tissue  
1-4 ..Lesion qualified as:  
1) Minimal  3) Moderate  
2) Mild  4) Marked

---

Page 20
**Experiment Number:** 88148-01

**Test Type:** 14-DAY

**Route:** GAVAGE

**Species/Strain:** Rat/F 344/N

---

**Test Compound:** 3,3',4,4'-Tetrachloroazobenzene

**CAS Number:** 14047-09-7

---

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 07:45:18

**First Dose M/F:** NA / NA

**Lab:** MBA

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### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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**F 344/N Rat Female**

**80 MG/KG**

| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

**TOTALS**

---

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

---

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal  
2) Mild  
3) Moderate  
4) Marked
**Experiment Number:** 88148-01  
**Test Type:** 14-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**Test Compound:** 3,3',4,4'-Tetrachloroazobenzene  
**CAS Number:** 14047-09-7

---

### Alimentary System

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<th>Liver</th>
<th>Hepatodiaphragmatic Nodule</th>
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**TOTALS:**  
Liver: 5  
Hepatodiaphragmatic Nodule: 2  

### Cardiovascular System

**NONE**

### Endocrine System

**NONE**

### General Body System

**NONE**

### Genital System

**NONE**

### Hematopoietic System

<table>
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**TOTALS:**  
Spleen: 5  
Hematopoietic Cell Proliferation: 5  

### Integumentary System

**NONE**

### Musculoskeletal System

**NONE**

---

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ ..Tissue examined microscopically  
M ..Missing tissue  
1-4 ..Lesion qualified as:  
1) Minimal  
2) Mild  
3) Moderate  
4) Marked  
A ..Autolysis precludes evaluation  
BLANK ..Not examined microscopically
Experiment Number: 88148-01
Test Type: 14-DAY
Route: GAVAGE
Species/Strain: Rat/F 344/N

test compound: 3,3',4,4'-Tetrachloroazobenzene
CAS Number: 14047-09-7

Date Report Requested: 10/20/2014
Time Report Requested: 07:45:18
First Dose M/F: NA / NA
Lab: MBA

Non-neoplastic lesions by individual animal

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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*TOTALS*

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

*Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
M .. Missing tissue
A .. Autolysis precludes evaluation
I .. Insufficient tissue
1-4 .. Lesion qualified as:
   1) Minimal  3) Moderate
   2) Mild      4) Marked
**Experiment Number:** 88148-01  
**Test Type:** 14-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N  

---

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
**Test Compound:** 3,3',4,4'-Tetrachloroazobenzene  
**CAS Number:** 14047-09-7  

**Date Report Requested:** 10/20/2014  
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**First Dose M/F:** NA / NA  
**Lab:** MBA  

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**F 344/N Rat Female**  
**500 MG/KG**  

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*TOTALS*  

---

**Alimentary System**  
- Liver: + + + + + 5  
- Stomach, Forestomach: + + + + + 5  
- Stomach, Glandular: + + + + + 5  

**Cardiovascular System**  
- NONE  

**Endocrine System**  
- NONE  

**General Body System**  
- NONE  

**Genital System**  
- Ovary: + 1  
- Cyst: 2 1 2.0  

**Hematopoietic System**  
- Lymph Node, Mesenteric: + + + + + 5  
- Spleen: + + + + + 5  
- Hematopoietic Cell Proliferation: 1 1 1 1 5 1.0  
- Thymus: + + + + + 5  
- Thymocyte, Atrophy: 1 1 1.0  

---

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ ..Tissue examined microscopically  
M ..Missing tissue  
1-4 ..Lesion qualified as:  
1) Minimal  2) Mild  3) Moderate  4) Marked  
X ..Lesion present  
A ..Autolysis precludes evaluation  
I ..Insufficient tissue  
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**First Dose M/F:** NA / NA  
**Lab:** MBA

### F 344/N Rat Female  
**500 MG/KG**

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**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

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**END OF REPORT**

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