

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>C Number:</b>	C91005B
<b>Lock Date:</b>	05/12/1994
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	NONE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 1	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9402801

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**OBSERVATIONS**

* Heart	Inflammation	Chronic, Focal, Minimal
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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 91005-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Methylene blue trihydrate

CAS Number: 7220-79-3

Date Report Requested: 10/15/2014

Time Report Requested: 18:00:33

First Dose M/F: NA / NA

Lab: BAT

<b>ANIMAL ID:</b> 2	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9402802

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex         | * Adrenal Medulla          | * Blood Vessel            | * Bone                      |
| * Bone Marrow            | * Brain                    | * Epididymis              | * Esophagus                 |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Kidney                    |
| * Lung                   | * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             |
| * Nose                   | * Pancreas                 | * Pituitary Gland         | * Preputial Gland           |
| * Salivary Glands        | * Seminal Vesicle          | * Skin                    | * Spleen                    |
| * Stomach, Forestomach   | * Stomach, Glandular       | * Testes                  | * Thymus                    |
| * Thyroid Gland          | * Trachea                  | * Urinary Bladder         |                             |

MISSING

- \* Parathyroid Gland

OBSERVATIONS

- |            |   |                            |                         |
|------------|---|----------------------------|-------------------------|
| * Heart    |   | Inflammation               | Chronic, Focal, Minimal |
| * Liver    |   | Hepatodiaphragmatic Nodule |                         |
|            | Centrilobular                             | Vacuolization Cytoplasmic  | Mild                    |
|            | [ Hepatodiaphragmatic Nodule TGLS = 1-4 ] |                            |                         |
| * Prostate |   | Inflammation               | Chronic Active, Minimal |

PRIMARY CAUSE OF DEATH	-
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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 91005-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Methylene blue trihydrate

CAS Number: 7220-79-3

Date Report Requested: 10/15/2014

Time Report Requested: 18:00:33

First Dose M/F: NA / NA

Lab: BAT

<b>ANIMAL ID:</b> 3	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9402803

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex         | * Adrenal Medulla          | * Blood Vessel            | * Bone                      |
| * Bone Marrow            | * Brain                    | * Epididymis              | * Esophagus                 |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Lymph Node, Mandibular    |
| * Lymph Node, Mesenteric | * Mammary Gland            | * Nose                    | * Pancreas                  |
| * Parathyroid Gland      | * Pituitary Gland          | * Preputial Gland         | * Salivary Glands           |
| * Seminal Vesicle        | * Skin                     | * Spleen                  | * Stomach, Forestomach      |
| * Stomach, Glandular     | * Testes                   | * Thymus                  | * Thyroid Gland             |
| * Trachea                | * Urinary Bladder          |                           |                             |

OBSERVATIONS

- |            |               |                           |                           |
|------------|---------------|---------------------------|---------------------------|
| * Heart    |               | Inflammation              | Chronic, Diffuse, Minimal |
| * Kidney   |               | Nephropathy               | Minimal                   |
| * Liver    | Centrilobular | Vacuolization Cytoplasmic | Minimal                   |
| * Lung     |               | Inflammation              | Focal, Minimal            |
| * Prostate |               | Inflammation              | Chronic Active, Minimal   |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 4	<b>TRT#:</b> 1 <b>DOSE:</b> 0 MG/KG	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 92 <b>HISTO:</b> 9402804
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**OBSERVATIONS**

* Heart		Inflammation	Chronic, Focal, Minimal
* Kidney		Nephropathy	Minimal
* Liver	Centrilobular	Vacuolization Cytoplasmic	Minimal
* Lung		Inflammation	Focal, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

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<b>ANIMAL ID:</b> 5	<b>TRT#:</b> 1 <b>DOSE:</b> 0 MG/KG	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 92 <b>HISTO:</b> 9402805
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

\* Parathyroid Gland

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**OBSERVATIONS**

* Heart		Inflammation	Chronic, Focal, Minimal
* Liver	Centrilobular	Vacuolization Cytoplasmic	Mild
* Lung	Alveolus	Infiltration Cellular	Macrophage, Minimal
* Prostate		Inflammation	Chronic Active, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

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<b>ANIMAL ID:</b> 6	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9402806

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

\* Parathyroid Gland

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**OBSERVATIONS**

* Liver	Centrilobular	Vacuolization Cytoplasmic	Mild
* Lung		Inflammation	Chronic, Diffuse, Mild
* Spleen	Capsule	Fibrosis	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 7	<b>TRT#:</b> 1 <b>DOSE:</b> 0 MG/KG	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 92 <b>HISTO:</b> 9402807
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**OBSERVATIONS**

* Heart		Inflammation	Chronic, Focal, Minimal
* Kidney		Nephropathy	Minimal
* Liver	Centrilobular	Vacuolization Cytoplasmic	Minimal
* Lung		Inflammation	Chronic, Diffuse, Mild
Mesentery	Fat	Inflammation	Chronic, Focal, Mild
[ Inflammation TGLS = 1-12 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 8	<b>TRT#:</b> 1 <b>DOSE:</b> 0 MG/KG	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 92 <b>HISTO:</b> 9402808
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

\* Parathyroid Gland

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**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
* Liver		Hepatodiaphragmatic Nodule	
	Centrilobular	Vacuolization Cytoplasmic	Minimal
	[ Hepatodiaphragmatic Nodule TGLS = 1-4 ]		
* Lung		Inflammation	Chronic, Diffuse, Mild
Lymph Node	Mediastinal	Hyperplasia	Lymphoid, Diffuse, Moderate
	[ Hyperplasia TGLS = 2-12 ]		

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 9	<b>TRT#:</b> 1 <b>DOSE:</b> 0 MG/KG	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 92 <b>HISTO:</b> 9402809
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

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**OBSERVATIONS**

* Liver	Centrilobular	Vacuolization Cytoplasmic	Mild
* Lung		Inflammation	Chronic, Diffuse, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 10

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402810

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Lung	Inflammation	Chronic, Diffuse, Mild
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

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**ANIMAL ID:** 11

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402811

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Bone Marrow

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**OBSERVATIONS**

\* Spleen

Congestion

Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

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**ANIMAL ID:** 12

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402812

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Bone Marrow

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**OBSERVATIONS**

\* Spleen

Congestion

Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

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**ANIMAL ID:** 13

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402813

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Bone Marrow

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**OBSERVATIONS**

\* Spleen

Congestion

Mild

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 14

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402814

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

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**OBSERVATIONS**

\* Spleen

Congestion

Mild

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

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**ANIMAL ID:** 15

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402815

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

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**OBSERVATIONS**

\* Spleen

Capsule

Congestion

Minimal

Fibrosis

Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 91005-03

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Date Report Requested:** 10/15/2014

**Test Type:** 90-DAY

**Test Compound:** Methylene blue trihydrate

**Time Report Requested:** 18:00:33

**Route:** GAVAGE

**CAS Number:** 7220-79-3

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

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

**Lab:** BAT

**ANIMAL ID:** 16

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402816

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Bone Marrow

**OBSERVATIONS**

\* Liver Hepatodiaphragmatic Nodule

[ Hepatodiaphragmatic Nodule TGLS = 1-12 ]

\* Spleen Congestion Mild

Capsule Fibrosis Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 17	<b>TRT#:</b> 3 <b>DOSE:</b> 25 MG/KG	<b>SEX:</b> Male <b>DISP:</b> Dosing Accident	<b>DAY ON TEST:</b> 71 <b>HISTO:</b> 9402817
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---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

---

**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
		Vacuolization Cytoplasmic	Diffuse, Mild
* Liver	Centrilobular	Vacuolization Cytoplasmic	Minimal
* Prostate		Inflammation	Chronic Active, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 18

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402818

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 19

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402819

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 20

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402820

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 21

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402821

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 22

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402822

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 23

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402823

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 24

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402824

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 25

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402825

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 26

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402826

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 27

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402827

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 28

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402828

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Lung

Cyst

Moderate

Note: there are two bullous cystic area, probably associated with bronchi or bronchiols

[ Cyst TGLS = 1-2 ]

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 29

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402829

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 30

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402830

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 31

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402831

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 32

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402832

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 33

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402833

---

**OBSERVATIONS**

\* Bone Marrow

\* Spleen

Lymph Follic

Hyperplasia

Congestion

Depletion Cellular

Hematopoietic Cell Proliferation

Mild

Mild

Minimal

Mild

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 34	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 100 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9402834

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

---

**OBSERVATIONS**

* Bone Marrow	Hyperplasia	Mild
Eye		
Note: tgl1, discoloration left eye not apparent on micro		
* Spleen	Congestion	Mild
	Hematopoietic Cell Proliferation	Mild

---

PRIMARY CAUSE OF DEATH

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 35

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402835

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Capsule

Fibrosis

Minimal

Hematopoietic Cell Proliferation

Mild

[ Congestion TGLS = 1-1 ]

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 36

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402836

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 37

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402837

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Liver

Hepatodiaphragmatic Nodule

[ Hepatodiaphragmatic Nodule TGLS = 1-4 ]

\* Spleen

Congestion

Mild

Lymph Follic

Depletion Cellular

Minimal

Hematopoietic Cell Proliferation

Mild

[ Congestion TGLS = 2-1 ]

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 38

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402838

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Liver

Hepatodiaphragmatic Nodule

[ Hepatodiaphragmatic Nodule TGLS = 1-4 ]

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 39

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402839

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 40

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402840

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 41

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 200 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402841

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Moderate
* Heart		Inflammation	Chronic, Diffuse, Minimal
* Liver	Centrilobular	Vacuolization Cytoplasmic	Mild
* Spleen		Congestion	Mild
	Lymph Follic	Depletion Cellular	Mild
	Capsule	Fibrosis	Minimal
		Hematopoietic Cell Proliferation	Mild

[ Congestion TGLS = 1-1 ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 42	<b>TRT#:</b> 9	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 200 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9402842

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

\* Parathyroid Gland

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**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Moderate
* Liver	Centrilobular	Vacuolization Cytoplasmic	Mild
* Spleen		Congestion	Mild
	Capsule	Fibrosis	Minimal
		Hematopoietic Cell Proliferation	Mild

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[ Congestion TGLS = 1-1 ]

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 43

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 200 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402843

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

\* Parathyroid Gland

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Moderate
* Heart		Inflammation	Chronic, Focal, Minimal
* Kidney		Nephropathy	Minimal
* Liver	Centrilobular	Vacuolization Cytoplasmic	Mild
* Prostate		Inflammation	Chronic Active, Minimal
* Spleen		Congestion	Mild
	Lymph Follic	Depletion Cellular	Mild
	Capsule	Fibrosis	Minimal
		Hematopoietic Cell Proliferation	Mild
[ Congestion TGLS = 1-1 ]			
* Stomach, Glandular		Mineralization	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 91005-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Methylene blue trihydrate

CAS Number: 7220-79-3

Date Report Requested: 10/15/2014

Time Report Requested: 18:00:33

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 44

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 200 MG/KG

DISP: Terminal Sacrifice

HISTO: 9402844

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex         | * Adrenal Medulla          | * Blood Vessel            | * Bone                      |
| * Brain                  | * Epididymis               | * Esophagus               | * Heart                     |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Kidney                    |
| * Lung                   | * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             |
| * Nose                   | * Pancreas                 | * Pituitary Gland         | * Preputial Gland           |
| * Prostate               | * Salivary Glands          | * Seminal Vesicle         | * Skin                      |
| * Stomach, Forestomach   | * Stomach, Glandular       | * Testes                  | * Thymus                    |
| * Thyroid Gland          | * Trachea                  | * Urinary Bladder         |                             |

MISSING

- \* Parathyroid Gland

OBSERVATIONS

- |               |               |                                  |          |
|---------------|---------------|----------------------------------|----------|
| * Bone Marrow |               | Hyperplasia                      | Moderate |
| * Liver       | Centrilobular | Vacuolization Cytoplasmic        | Mild     |
| * Spleen      |               | Congestion                       | Minimal  |
|               | Lymph Follic  | Depletion Cellular               | Minimal  |
|               | Capsule       | Fibrosis                         | Minimal  |
|               |               | Hematopoietic Cell Proliferation | Mild     |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 91005-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Methylene blue trihydrate

CAS Number: 7220-79-3

Date Report Requested: 10/15/2014

Time Report Requested: 18:00:33

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 45

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 200 MG/KG

DISP: Terminal Sacrifice

HISTO: 9402845

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | * Blood Vessel              | * Bone                   |
| * Brain                    | * Epididymis              | * Esophagus                 | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Kidney                    | * Lung                   |
| * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             | * Nose                   |
| * Pancreas                 | * Parathyroid Gland       | * Pituitary Gland           | * Preputial Gland        |
| * Prostate                 | * Salivary Glands         | * Seminal Vesicle           | * Skin                   |
| * Stomach, Forestomach     | * Stomach, Glandular      | * Testes                    | * Thymus                 |
| * Thyroid Gland            | * Trachea                 | * Urinary Bladder           |                          |

OBSERVATIONS

- |               |               |                                  |                         |
|---------------|---------------|----------------------------------|-------------------------|
| * Bone Marrow |               | Hyperplasia                      | Moderate                |
| * Heart       |               | Inflammation                     | Chronic, Focal, Minimal |
| * Liver       | Centrilobular | Vacuolization Cytoplasmic        | Minimal                 |
| * Spleen      |               | Congestion                       | Mild                    |
|               | Lymph Follic  | Depletion Cellular               | Minimal                 |
|               | Capsule       | Fibrosis                         | Minimal                 |
|               |               | Hematopoietic Cell Proliferation | Mild                    |

[ Congestion TGLS = 1-1 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 46

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 200 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402846

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Moderate
* Heart		Inflammation	Chronic, Diffuse, Mild
* Kidney		Nephropathy	Minimal
* Liver	Centrilobular	Vacuolization Cytoplasmic	Minimal
* Prostate		Inflammation	Chronic Active, Minimal
* Spleen		Congestion	Mild
		Hematopoietic Cell Proliferation	Mild

[ Congestion TGLS = 1-1 ]

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 47

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 200 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402847

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Adrenal Cortex		Vacuolization Cytoplasmic	Focal, Minimal
* Bone Marrow		Hyperplasia	Moderate
* Heart		Inflammation	Chronic, Diffuse, Minimal
* Liver	Centrilobular	Vacuolization Cytoplasmic	Minimal
* Lung		Inflammation	Chronic, Diffuse, Mild
* Spleen		Congestion	Mild
	Lymph Follic	Depletion Cellular	Minimal
	Capsule	Fibrosis	Minimal
		Hematopoietic Cell Proliferation	Mild

[ Congestion TGLS = 1-1 ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 91005-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Methylene blue trihydrate

CAS Number: 7220-79-3

Date Report Requested: 10/15/2014

Time Report Requested: 18:00:33

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 48

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 200 MG/KG

DISP: Terminal Sacrifice

HISTO: 9402848

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | * Blood Vessel              | * Bone                   |
| * Brain                    | * Epididymis              | * Esophagus                 | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Lung                      | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Nose                      | * Pancreas               |
| * Parathyroid Gland        | * Pituitary Gland         | * Preputial Gland           | * Salivary Glands        |
| * Seminal Vesicle          | * Skin                    | * Stomach, Forestomach      | * Stomach, Glandular     |
| * Testes                   | * Thymus                  | * Thyroid Gland             | * Trachea                |
| * Urinary Bladder          |                           |                             |                          |

OBSERVATIONS

- |               |               |                                  |                         |
|---------------|---------------|----------------------------------|-------------------------|
| * Bone Marrow |               | Hyperplasia                      | Moderate                |
| * Heart       |               | Inflammation                     | Chronic, Focal, Minimal |
| * Kidney      |               | Nephropathy                      | Minimal                 |
| * Liver       | Centrilobular | Vacuolization Cytoplasmic        | Minimal                 |
| * Prostate    |               | Inflammation                     | Chronic Active, Minimal |
| * Spleen      |               | Congestion                       | Mild                    |
|               | Capsule       | Fibrosis                         | Minimal                 |
|               |               | Hematopoietic Cell Proliferation | Mild                    |

[ Congestion TGLS = 1-1 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 91005-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Methylene blue trihydrate

CAS Number: 7220-79-3

Date Report Requested: 10/15/2014

Time Report Requested: 18:00:33

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 49

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 200 MG/KG

DISP: Terminal Sacrifice

HISTO: 9402849

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Bone Marrow		Hyperplasia	Moderate
* Liver	Centrilobular	Vacuolization Cytoplasmic	Minimal
* Spleen	Capsule	Congestion	Mild
		Fibrosis	Minimal
		Hematopoietic Cell Proliferation	Mild

[ Congestion TGLS = 1-1 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 91005-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Methylene blue trihydrate

CAS Number: 7220-79-3

Date Report Requested: 10/15/2014

Time Report Requested: 18:00:33

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 50

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 200 MG/KG

DISP: Terminal Sacrifice

HISTO: 9402850

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Bone Marrow		Hyperplasia	Moderate
* Liver	Centrilobular	Vacuolization Cytoplasmic	Minimal
* Spleen	Capsule	Congestion	Mild
		Fibrosis	Minimal
		Hematopoietic Cell Proliferation	Mild

[ Congestion TGLS = 1-1 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 51

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402851

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 52

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402852

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

**ANIMAL ID:** 53

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402853

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Cortex  
\* Bone Marrow  
\* Heart  
\* Intestine Small, Duodenum  
\* Kidney  
\* Lymph Node, Mesenteric  
\* Pancreas  
\* Skin  
\* Thymus  
\* Uterus

\* Adrenal Medulla  
\* Brain  
\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Liver  
\* Mammary Gland  
\* Parathyroid Gland  
\* Spleen  
\* Thyroid Gland

\* Blood Vessel  
\* Clitoral Gland  
\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Lung  
\* Nose  
\* Pituitary Gland  
\* Stomach, Forestomach  
\* Trachea

\* Bone  
\* Esophagus  
\* Intestine Large, Rectum  
\* Islets, Pancreatic  
\* Lymph Node, Mandibular  
\* Ovary  
\* Salivary Glands  
\* Stomach, Glandular  
\* Urinary Bladder

**OBSERVATIONS**

Mesentery

Inflammation

Chronic, Focal, Mild

[ Inflammation TGLS = 1-11 ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 54	<b>TRT#:</b> 2	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9402854

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

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**OBSERVATIONS**

* Ovary	Periovarn Tiss	Cyst	Mild
[ Cyst TGLS = 1-10 ]			

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

**ANIMAL ID:** 55

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402855

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**OBSERVATIONS**

* Ovary [ Cyst TGLS = 1-10 ]	Periovarn Tiss	Cyst	Moderate
* Stom Forestom			

Note: tgl 2,white nodule, not on slide or in wet tissue, probably fat on serosa.

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 56

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402856

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 57

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402857

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 58

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402858

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 59

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 8402859

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**OBSERVATIONS**

* Uterus	Dilatation	Minimal
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PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

**ANIMAL ID:** 60

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402860

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Cortex  
\* Bone Marrow  
\* Heart  
\* Intestine Small, Duodenum  
\* Kidney  
\* Mammary Gland  
\* Parathyroid Gland  
\* Spleen  
\* Thyroid Gland

\* Adrenal Medulla  
\* Brain  
\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Liver  
\* Nose  
\* Pituitary Gland  
\* Stomach, Forestomach  
\* Trachea

\* Blood Vessel  
\* Clitoral Gland  
\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Lymph Node, Mandibular  
\* Ovary  
\* Salivary Glands  
\* Stomach, Glandular  
\* Urinary Bladder

\* Bone  
\* Esophagus  
\* Intestine Large, Rectum  
\* Islets, Pancreatic  
\* Lymph Node, Mesenteric  
\* Pancreas  
\* Skin  
\* Thymus

**OBSERVATIONS**

\* Lung  
\* Uterus

Inflammation  
Dilatation

Chronic, Diffuse, Mild  
Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 61

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402861

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 62

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402862

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 63

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402863

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 64

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402864

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 65

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402865

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 66

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402866

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 67

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402867

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

\* Spleen

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 68

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402868

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 69

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402869

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 70

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 25 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402870

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 71

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402871

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 72

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402872

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Minimal

\* Ovary

Periovarn Tiss

Cyst

Mild

[ Cyst TGLS = 1-10 ]

\* Spleen

Congestion

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 73

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402873

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 74

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402874

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 75

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402875

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion  
Hematopoietic Cell Proliferation

Mild  
Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 76

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402876

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 77

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402877

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 78

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402878

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 79

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402879

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Minimal

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 80

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 50 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402880

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Minimal

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 81

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402881

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Minimal

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 82

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402882

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone Marrow

---

**OBSERVATIONS**

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

**ANIMAL ID:** 83

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 14

**DOSE:** 100 MG/KG

**DISP:** Dosing Accident

**HISTO:** 9402883

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mesenteric

**OBSERVATIONS**

* Bone Marrow	Hyperplasia	Mild
* Lung		

Note: lung appears within normal limits on micro, dye not visible

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 84

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402884

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Lymph Follic

Depletion Cellular

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 85

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402885

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Minimal

\* Spleen

Congestion

Mild

Capsule

Fibrosis

Minimal

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 86

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402886

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Capsule

Fibrosis

Minimal

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 87

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402887

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 88

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402888

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 89

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402889

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Liver

Hepatodiaphragmatic Nodule

[ Hepatodiaphragmatic Nodule TGLS = 1-4 ]

\* Spleen

Congestion

Mild

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

---

**ANIMAL ID:** 90

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 100 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402890

---

**OBSERVATIONS**

\* Bone Marrow

Hyperplasia

Mild

\* Spleen

Congestion

Mild

Capsule

Fibrosis

Minimal

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03

**Test Type:** 90-DAY

**Route:** GAVAGE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Methylene blue trihydrate

**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014

**Time Report Requested:** 18:00:33

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

**Lab:** BAT

**ANIMAL ID:** 91

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 14

**DOSE:** 200 MG/KG

**DISP:** Dosing Accident

**HISTO:** 9402891

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Moderate
* Liver	Centrilobular	Vacuolization Cytoplasmic	Minimal
* Lung		Hemorrhage	Acute, Diffuse, Moderate
* Spleen		Congestion	Mild
	Capsule	Fibrosis	Minimal
		Hematopoietic Cell Proliferation	Moderate

**PRIMARY CAUSE OF DEATH**

-

Animal Note: tgl 2-2,2-3 color changes due to dye, no corresponding lesion.

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 92	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 200 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9402892

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

---

**MISSING**

\* Parathyroid Gland

---

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Moderate
* Heart		Inflammation	Chronic, Focal, Minimal
* Liver	Centrilobular	Vacuolization Cytoplasmic	Minimal
* Spleen		Congestion	Mild
	Lymph Follic	Depletion Cellular	Mild
	Capsule	Fibrosis	Minimal
		Hematopoietic Cell Proliferation	Mild

---

[ Congestion TGLS = 1-1 ]

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 93

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 27

**DOSE:** 200 MG/KG

**DISP:** Dosing Accident

**HISTO:** 9402893

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Moderate
* Spleen		Congestion	Minimal
	Lymph Follic	Depletion Cellular	Minimal
	Capsule	Fibrosis	Minimal
		Hematopoietic Cell Proliferation	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 91005-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Methylene blue trihydrate

CAS Number: 7220-79-3

Date Report Requested: 10/15/2014

Time Report Requested: 18:00:33

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 94

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 200 MG/KG

DISP: Terminal Sacrifice

HISTO: 9402894

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Cortex  
\* Brain  
\* Intestine Large, Cecum  
\* Intestine Small, Jejunum  
\* Lung  
\* Nose  
\* Salivary Glands  
\* Thymus

\* Adrenal Medulla  
\* Clitoral Gland  
\* Intestine Large, Colon  
\* Islets, Pancreatic  
\* Lymph Node, Mandibular  
\* Ovary  
\* Skin  
\* Thyroid Gland

\* Blood Vessel  
\* Esophagus  
\* Intestine Large, Rectum  
\* Kidney  
\* Lymph Node, Mesenteric  
\* Pancreas  
\* Stomach, Forestomach  
\* Trachea

\* Bone  
\* Heart  
\* Intestine Small, Duodenum  
\* Liver  
\* Mammary Gland  
\* Pituitary Gland  
\* Stomach, Glandular  
\* Urinary Bladder

**MISSING**

\* Intestine Small, Ileum

\* Parathyroid Gland

**OBSERVATIONS**

\* Bone Marrow  
\* Spleen

Lymph Follic  
Capsule

Hyperplasia  
Congestion  
Depletion Cellular  
Fibrosis  
Hematopoietic Cell Proliferation  
Dilatation

Moderate  
Mild  
Mild  
Minimal  
Mild  
Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 91005-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Methylene blue trihydrate

CAS Number: 7220-79-3

Date Report Requested: 10/15/2014

Time Report Requested: 18:00:33

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 95

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 200 MG/KG

DISP: Terminal Sacrifice

HISTO: 9402895

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex         | * Adrenal Medulla          | * Blood Vessel            | * Bone                      |
| * Brain                  | * Clitoral Gland           | * Esophagus               | * Heart                     |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Kidney                    |
| * Liver                  | * Lung                     | * Lymph Node, Mandibular  | * Lymph Node, Mesenteric    |
| * Mammary Gland          | * Nose                     | * Ovary                   | * Pancreas                  |
| * Pituitary Gland        | * Salivary Glands          | * Skin                    | * Stomach, Forestomach      |
| * Stomach, Glandular     | * Thymus                   | * Thyroid Gland           | * Trachea                   |
| * Urinary Bladder        | * Uterus                   |                           |                             |

MISSING

- \* Parathyroid Gland

OBSERVATIONS

- |               |              |                                  |          |
|---------------|--------------|----------------------------------|----------|
| * Bone Marrow |              | Hyperplasia                      | Moderate |
| * Spleen      |              | Congestion                       | Mild     |
|               | Lymph Follic | Depletion Cellular               | Mild     |
|               |              | Hematopoietic Cell Proliferation | Mild     |

[ Congestion TGLS = 1-1 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 96	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 71
	<b>DOSE:</b> 200 MG/KG	<b>DISP:</b> Dosing Accident	<b>HISTO:</b> 9402896

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

---

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Moderate
* Spleen	Lymph Follic	Depletion Cellular	Mild
		Hematopoietic Cell Proliferation	Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 97	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 27
	<b>DOSE:</b> 200 MG/KG	<b>DISP:</b> Dosing Accident	<b>HISTO:</b> 9402897

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

---

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Mild
* Spleen		Congestion	Minimal
	Lymph Follic	Depletion Cellular	Minimal
	Capsule	Fibrosis	Minimal
		Hematopoietic Cell Proliferation	Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 98	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 200 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9402898

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

---

**MISSING**

\* Parathyroid Gland

---

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Moderate
* Nose		Inflammation	Chronic, Minimal
* Spleen		Congestion	Mild
	Lymph Follic	Depletion Cellular	Minimal
	Capsule	Fibrosis	Minimal
		Hematopoietic Cell Proliferation	Mild

---

[ Congestion TGLS = 1-1 ]

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 91005-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Methylene blue trihydrate

CAS Number: 7220-79-3

Date Report Requested: 10/15/2014

Time Report Requested: 18:00:33

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 99

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 200 MG/KG

DISP: Terminal Sacrifice

HISTO: 9402899

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex         | * Adrenal Medulla          | * Blood Vessel            | * Bone                      |
| * Brain                  | * Clitoral Gland           | * Esophagus               | * Heart                     |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Kidney                    |
| * Liver                  | * Lung                     | * Lymph Node, Mesenteric  | * Mammary Gland             |
| * Nose                   | * Ovary                    | * Pancreas                | * Parathyroid Gland         |
| * Pituitary Gland        | * Salivary Glands          | * Skin                    | * Stomach, Forestomach      |
| * Stomach, Glandular     | * Thymus                   | * Thyroid Gland           | * Trachea                   |
| * Urinary Bladder        | * Uterus                   |                           |                             |

MISSING

- \* Lymph Node, Mandibular

OBSERVATIONS

- |               |              |                                  |          |
|---------------|--------------|----------------------------------|----------|
| * Bone Marrow |              | Hyperplasia                      | Moderate |
| * Spleen      |              | Congestion                       | Mild     |
|               | Lymph Follic | Depletion Cellular               | Minimal  |
|               |              | Hematopoietic Cell Proliferation | Minimal  |

[ Congestion TGLS = 1-1 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 91005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Methylene blue trihydrate  
**CAS Number:** 7220-79-3

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:00:33  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 100

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 200 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** 9402900

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Moderate
* Liver		Hepatodiaphragmatic Nodule	
[ Hepatodiaphragmatic Nodule TGLS = 2-4 ]			
* Spleen		Congestion	Mild
	Lymph Follic	Depletion Cellular	Mild
	Capsule	Fibrosis	Minimal
		Hematopoietic Cell Proliferation	Mild
[ Congestion TGLS = 1-1 ]			

PRIMARY CAUSE OF DEATH

-

**\*\* END OF REPORT \*\***

\* PROTOCOL REQUIRED TISSUE