

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

F1_M3

C Number: C20515
Lock Date: 04/04/2007
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 2.0.0

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Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	1	TMT:	1	SEX:	Male	DAY ON TEST:	95
		DOSE:	0 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55330

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Kidney | * Larynx | * Liver |
| * Lung | * Lymph Node, Bronchial | * Lymph Node, Mesenteric | * 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 |
-

MISSING

- | | | | |
|----------------------|--------------------------|---------------------------|-----------------|
| * Islets, Pancreatic | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Mammary Gland |
|----------------------|--------------------------|---------------------------|-----------------|
-

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Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	2	TMT:	1	SEX:	Male	DAY ON TEST:	95
		DOSE:	0 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55331

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Larynx |
| * Liver | * Lung | * Lymph Node, Bronchial | * Lymph Node, Mesenteric |
| * 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 | | | |
-

MISSING

- | | |
|---------------------------|-----------------|
| * Lymph Node, Mediastinal | * Mammary Gland |
|---------------------------|-----------------|
-

INSUFFICIENT TISSUE

- | |
|--------------------------|
| * Lymph Node, Mandibular |
|--------------------------|
-

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 3

TMT: 1

DOSE: 0 mg/m3

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 95

HISTO: 55332

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lymph Node, Bronchial
- * Parathyroid Gland
- * Salivary Glands
- * Stomach, Forestomach
- * Thyroid Gland

- * Adrenal Medulla
- * Epididymis
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Trachea

- * Bone
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Larynx
- * Nose
- * Preputial Gland
- * Skin
- * Testes
- * Urinary Bladder

- * Bone Marrow
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lung
- * Pancreas
- * Prostate
- * Spleen
- * Thymus

MISSING

- * Gallbladder

- * Lymph Node, Mandibular

- * Lymph Node, Mediastinal

- * Mammary Gland

OBSERVATIONS

- * Liver

Cyst
Inflammation
Parasite Metazoan

Moderate
Chronic, Mild

Note: THE HEPATIC CYST CONTAINED AN INTRALESIONAL TREMATODE PARASITE BORDERED BY MILD FIBROSIS AND AGGREGATES OF LYMPHOCYTES AND PLASMA CELLS.

[Cyst TGLs = 1-5]

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Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 4	TMT: 1	SEX: Male	DAY ON TEST: 95
	DOSE: 0 mg/m3	DISP: Terminal Sacrifice	HISTO: 55333

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Larynx |
| * Liver | * Lung | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * 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 | | |
-

MISSING

- | | |
|---------------------------|-----------------|
| * Lymph Node, Mediastinal | * Mammary Gland |
|---------------------------|-----------------|
-

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Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	5	TMT:	1	SEX:	Male	DAY ON TEST:	95
		DOSE:	0 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55334

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Larynx |
| * Liver | * Lung | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * 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 | | |
-

MISSING

- | | |
|---------------------------|-----------------|
| * Lymph Node, Mediastinal | * Mammary Gland |
|---------------------------|-----------------|
-

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Species/Strain: MICE/B6C3F1

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Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 6	TMT: 1	SEX: Male	DAY ON TEST: 95
	DOSE: 0 mg/m3	DISP: Terminal Sacrifice	HISTO: 55335

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Larynx |
| * Liver | * Lung | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * 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 | | |

MISSING

- | | |
|---------------------------|-----------------|
| * Lymph Node, Mediastinal | * Mammary Gland |
|---------------------------|-----------------|
-

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Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	7	TMT:	1	SEX:	Male	DAY ON TEST:	95
		DOSE:	0 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55336

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Larynx |
| * Liver | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * 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 | | | |
-

MISSING

- | | |
|---------------------------|-----------------|
| * Lymph Node, Mediastinal | * Mammary Gland |
|---------------------------|-----------------|
-

INSUFFICIENT TISSUE

- | |
|-------------------------|
| * Lymph Node, Bronchial |
|-------------------------|
-

TDMS No. 20515 - 02

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P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	8	TMT:	1	SEX:	Male	DAY ON TEST:	95
		DOSE:	0 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55337

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Larynx | * Liver |
| * Lung | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * 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 | | | |

MISSING

- | | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

- | | | | |
|----------|--------------|--------------|---------|
| * Kidney | Renal Tubule | Regeneration | Minimal |
|----------|--------------|--------------|---------|

TDMS No. 20515 - 02

Test Type: 90-DAY

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Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	9	TMT:	1	SEX:	Male	DAY ON TEST:	95
		DOSE:	0 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55338

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Larynx |
| * Liver | * Lung | * Lymph Node, Mesenteric | * 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 |

MISSING

- | | | | |
|-------------------------|--------------------------|---------------------------|-----------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Mammary Gland |
|-------------------------|--------------------------|---------------------------|-----------------|

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 10	TMT: 1	SEX: Male	DAY ON TEST: 95
	DOSE: 0 mg/m3	DISP: Terminal Sacrifice	HISTO: 55339

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Larynx |
| * Liver | * Lung | * Lymph Node, Bronchial | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * 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 | | |

MISSING

- | | |
|--------------------------|-----------------|
| * Lymph Node, Mandibular | * Mammary Gland |
|--------------------------|-----------------|
-

TDMS No. 20515 - 02

Test Type: 90-DAY

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Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

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Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	203	TMT:	3	SEX:	Male	DAY ON TEST:	95
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55432

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	204	TMT:	3	SEX:	Male	DAY ON TEST:	95
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55433

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	205	TMT:	3	SEX:	Male	DAY ON TEST:	95
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55434

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	206	TMT:	3	SEX:	Male	DAY ON TEST:	95
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55435

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	207	TMT:	3	SEX:	Male	DAY ON TEST:	95
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55436

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	208	TMT:	3	SEX:	Male	DAY ON TEST:	95
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55437

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Metaplasia	Minimal Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Minimal Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	209	TMT:	3	SEX:	Male	DAY ON TEST:	95
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55438

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	210	TMT:	3	SEX:	Male	DAY ON TEST:	95
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55439

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	401	TMT:	5	SEX:	Male	DAY ON TEST:	95
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55410

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 402	TMT: 5	SEX: Male	DAY ON TEST: 95
	DOSE: 50 mg/m3	DISP: Terminal Sacrifice	HISTO: 55411

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Mild Squamous, Moderate
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Minimal Minimal
Testes	Germinal Epith	Degeneration	Marked
	[Degeneration TGLs = 1-8]		

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	403	TMT:	5	SEX:	Male	DAY ON TEST:	95
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55412

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	404	TMT:	5	SEX:	Male	DAY ON TEST:	95
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55413

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Moderate
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	405	TMT:	5	SEX:	Male	DAY ON TEST:	95
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55414

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	406	TMT:	5	SEX:	Male	DAY ON TEST:	95
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55415

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	407	TMT:	5	SEX:	Male	DAY ON TEST:	95
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55416

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	408	TMT:	5	SEX:	Male	DAY ON TEST:	95
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55417

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	409	TMT:	5	SEX:	Male	DAY ON TEST:	95
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55418

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	410	TMT:	5	SEX:	Male	DAY ON TEST:	95
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55419

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 601 TMT: 7
DOSE: 100 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55390

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Moderate
* Lung	Bronchiole Arteriole Perivascular	Hyperplasia Hypertrophy Inflammation	Mild Minimal Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 602 TMT: 7
DOSE: 100 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55391

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Moderate
* Lung	Bronchiole	Hyperplasia	Mild
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
	Olfactory Epi	Accumulation, Hyaline Droplet	Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 603 TMT: 7
DOSE: 100 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55392

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Moderate
* Lung	Bronchiole	Hyperplasia	Mild
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
	Olfactory Epi	Accumulation, Hyaline Droplet	Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 604 TMT: 7
DOSE: 100 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55393

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Moderate
* Lung	Bronchiole	Hyperplasia	Mild
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 605 TMT: 7
DOSE: 100 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55394

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Mild Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 606 TMT: 7
DOSE: 100 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55395

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Moderate
* Lung	Bronchiole	Hyperplasia	Mild
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 607 TMT: 7
DOSE: 100 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55396

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Moderate
* Lung	Bronchiole	Hyperplasia	Mild
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	608	TMT:	7	SEX:	Male	DAY ON TEST:	95
		DOSE:	100 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55397

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Moderate
* Lung	Bronchiole	Hyperplasia	Mild
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
	Olfactory Epi	Accumulation, Hyaline Droplet	Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 609 TMT: 7
DOSE: 100 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55398

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Moderate
* Lung	Bronchiole Arteriole	Hyperplasia Hypertrophy Infiltration Cellular	Mild Minimal Histiocyte, Minimal
	Perivascular	Inflammation	Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 610 TMT: 7
DOSE: 100 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55399

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Mild Squamous, Moderate
* Lung	Bronchiole Perivascular	Hyperplasia Inflammation	Mild Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 801 TMT: 9
DOSE: 200 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55370

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Mild Squamous, Moderate
* Lung	Bronchiole Arteriole Perivascular	Hyperplasia Hypertrophy Inflammation	Mild Minimal Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 802 TMT: 9
DOSE: 200 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55371

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Minimal Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 803 TMT: 9
DOSE: 200 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55372

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Minimal Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 804 TMT: 9
DOSE: 200 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55373

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole	Hyperplasia	Mild
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 805 TMT: 9
DOSE: 200 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55374

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Eye * Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	806	TMT:	9	SEX:	Male	DAY ON TEST:	95
		DOSE:	200 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55375

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole Arteriole Perivascular	Hyperplasia Hypertrophy Inflammation	Mild Minimal Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild
Spleen	[Hyperplasia TGLs = 1-6]	Hyperplasia	Lymphoid, Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 807 TMT: 9
DOSE: 200 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55376

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole Arteriole	Hyperplasia Hypertrophy Infiltration Cellular Inflammation	Mild Mild Histiocyte, Minimal Chronic Active, Minimal
* Nose	Perivascular Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 808 **TMT:** 9
DOSE: 200 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55377

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Minimal Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 809 TMT: 9
DOSE: 200 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55378

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Marked
* Lung	Bronchiole Perivascular	Hyperplasia Inflammation	Mild Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 810 TMT: 9
DOSE: 200 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55379

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Minimal Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 1001 TMT: 11
DOSE: 400 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55350

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Mammary Gland

OBSERVATIONS

- | | | | |
|----------|---------------------------------|--|---|
| * Larynx | Epiglottis
Squam Epithel | Dysplasia
Hyperplasia
Inflammation
Metaplasia | Minimal
Mild
Chronic Active, Mild
Squamous, Marked |
| * Lung | Bronchiole | Hyperplasia | Mild |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet | Mild
Mild |

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 1003 TMT: 11
DOSE: 400 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55352

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * 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, Bronchial | * Lymph Node, Mesenteric | * Pancreas | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thymus | * Thyroid Gland | * Urinary Bladder |

MISSING

- | | | | |
|--------------------------|---------------------------|-----------------|---------------------|
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Mammary Gland | * Parathyroid Gland |
|--------------------------|---------------------------|-----------------|---------------------|

OBSERVATIONS

- | | | | |
|-----------|---------------------------------|--|--|
| * Larynx | Epiglottis
Squam Epithel | Dysplasia
Hyperplasia
Inflammation
Metaplasia | Mild
Mild
Chronic Active, Mild
Squamous, Marked |
| * Lung | Bronchiole | Hyperplasia | Mild |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet | Mild
Mild |
| * Trachea | Epithelium | Metaplasia | Squamous, Minimal |

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	1005	TMT:	11	SEX:	Male	DAY ON TEST:	95
		DOSE:	400 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55354

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Liver | * Lymph Node, Bronchial |
| * Lymph Node, Mediastinal | * Pancreas | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

- | | | | |
|--------------------------|--------------------------|-----------------|---------------------|
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
|--------------------------|--------------------------|-----------------|---------------------|

OBSERVATIONS

- | | | | |
|----------|---|--|---|
| * Kidney | Renal Tubule | Regeneration | Minimal |
| * Larynx | Squam Epithel | Hyperplasia
Inflammation
Metaplasia | Mild
Chronic Active, Minimal
Squamous, Marked |
| * Lung | Bronchiole
Arteriole
Perivascular | Hyperplasia
Hypertrophy
Inflammation | Mild
Minimal
Chronic Active, Minimal |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet | Mild
Mild |

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 1006 TMT: 11
DOSE: 400 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55355

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mediastinal
- * Mammary Gland
- * Parathyroid Gland

OBSERVATIONS

- * Larynx
 - Epiglottis
 - Squam Epithel
 - * Lung
 - Bronchiole
 - * Nose
 - Respirat Epith
 - Olfactory Epi
- Dysplasia
 - Hyperplasia
 - Inflammation
 - Metaplasia
 - Hyperplasia
 - Accumulation, Hyaline Droplet
 - Accumulation, Hyaline Droplet
- Mild
 - Mild
 - Chronic Active, Mild
 - Squamous, Marked
 - Mild
 - Mild
 - Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 1007 TMT: 11
DOSE: 400 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55356

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular
- * Mammary Gland

INSUFFICIENT TISSUE

- * Lymph Node, Mediastinal

OBSERVATIONS

- | | | | |
|----------|---------------------------------|--|--|
| * Larynx | Epiglottis
Squam Epithel | Dysplasia
Hyperplasia
Inflammation
Metaplasia | Mild
Moderate
Chronic Active, Mild
Squamous, Marked |
| * Lung | Bronchiole
Perivascular | Hyperplasia
Inflammation | Mild
Chronic Active, Minimal |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet | Mild
Mild |

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 1008 TMT: 11
DOSE: 400 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55357

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Gallbladder
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mediastinal
- * Preputial Gland
- * Skin
- * Testes
- * Urinary Bladder

- * Adrenal Medulla
- * Epididymis
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Prostate
- * Spleen
- * Thymus

- * Bone
- * Esophagus
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Pancreas
- * Salivary Glands
- * Stomach, Forestomach
- * Thyroid Gland

- * Bone Marrow
- * Eye
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Bronchial
- * Pituitary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Trachea

MISSING

- * Lymph Node, Mandibular

- * Mammary Gland

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|----------|----------------|-------------------------------|----------------------|
| * Kidney | Renal Tubule | Regeneration | Mild |
| * Larynx | Epiglottis | Dysplasia | Mild |
| | Squam Epithel | Hyperplasia | Mild |
| | | Inflammation | Chronic Active, Mild |
| | | Metaplasia | Squamous, Marked |
| * Lung | Bronchiole | Hyperplasia | Mild |
| * Nose | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 1009 TMT: 11
DOSE: 400 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55358

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mediastinal
- * Mammary Gland
- * Parathyroid Gland

OBSERVATIONS

- * Larynx
 - Epiglottis
 - Squam Epithel
 - * Lung
 - Bronchiole
 - Perivascular
 - * Nose
 - Respirat Epith
 - Olfactory Epi
 - * Trachea
- Dysplasia
 - Hyperplasia
 - Inflammation
 - Metaplasia
 - Hyperplasia
 - Infiltration Cellular
 - Inflammation
 - Thrombosis
 - Accumulation, Hyaline Droplet
 - Accumulation, Hyaline Droplet
 - Inflammation
- Mild
 - Mild
 - Chronic Active, Mild
 - Squamous, Marked
 - Mild
 - Histiocyte, Minimal
 - Chronic Active, Minimal
 - Focal, Minimal
 - Mild
 - Mild
 - Suppurative, Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 1010 TMT: 11
DOSE: 400 mg/m3

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 55359

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lymph Node, Mediastinal
- * Preputial Gland
- * Skin
- * Testes
- * Urinary Bladder

- * Adrenal Medulla
- * Epididymis
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Lymph Node, Mesenteric
- * Prostate
- * Spleen
- * Thymus

- * Bone
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Liver
- * Pancreas
- * Salivary Glands
- * Stomach, Forestomach
- * Thyroid Gland

- * Bone Marrow
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Bronchial
- * Pituitary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Trachea

MISSING

- * Gallbladder

- * Lymph Node, Mandibular

- * Mammary Gland

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|----------|---|--|--|
| * Larynx | Squam Epithel | Hyperplasia
Inflammation
Metaplasia | Mild
Chronic Active, Mild
Squamous, Marked |
| * Lung | Bronchiole
Arteriole
Perivascular | Hyperplasia
Hypertrophy
Inflammation | Mild
Minimal
Chronic Active, Mild |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet
Inflammation | Mild
Mild
Suppurative, Minimal |

Note: THERE WERE MINIMAL AGGREGATES OF NEUTROPHILS LOCATED IN THE LAMINA PROPRIA OF TURBINATES IN THE VENTRAL PORTION OF LEVEL III.

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 101	TMT: 2	SEX: Female	DAY ON TEST: 96
	DOSE: 0 mg/m3	DISP: Terminal Sacrifice	HISTO: 55340

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Larynx | * Liver |
| * Lung | * Lymph Node, Bronchial | * 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 |

MISSING

- | | |
|---------------|---------------------------|
| * Gallbladder | * Lymph Node, Mediastinal |
|---------------|---------------------------|
-

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 102	TMT: 2	SEX: Female	DAY ON TEST: 96
	DOSE: 0 mg/m3	DISP: Terminal Sacrifice	HISTO: 55341

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- | | |
|---------------|---------------------------|
| * Gallbladder | * Lymph Node, Mediastinal |
|---------------|---------------------------|

OBSERVATIONS

- | | | |
|-------------------|--------------|------------------|
| * Salivary Glands | Inflammation | Chronic, Minimal |
|-------------------|--------------|------------------|

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 103	TMT: 2	SEX: Female	DAY ON TEST: 96
	DOSE: 0 mg/m3	DISP: Terminal Sacrifice	HISTO: 55342

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Larynx | * Liver |
| * Lung | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * 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 | | | |

MISSING

- * Gallbladder
-

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 104	TMT: 2	SEX: Female	DAY ON TEST: 96
	DOSE: 0 mg/m3	DISP: Terminal Sacrifice	HISTO: 55343

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Parathyroid Gland
-

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 105	TMT: 2	SEX: Female	DAY ON TEST: 96
	DOSE: 0 mg/m3	DISP: Terminal Sacrifice	HISTO: 55344

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- | | | | |
|---------------------|-------------------------|--------------------------|---------------------------|
| * Gallbladder | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Parathyroid Gland | | | |

INSUFFICIENT TISSUE

- * Urinary Bladder
-

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 106	TMT: 2	SEX: Female	DAY ON TEST: 96
	DOSE: 0 mg/m3	DISP: Terminal Sacrifice	HISTO: 55345

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mediastinal

OBSERVATIONS

- | | | |
|-----------------|--------------|----------------------|
| * Thyroid Gland | Inflammation | Chronic Active, Mild |
|-----------------|--------------|----------------------|

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 107 TMT: 2
DOSE: 0 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55346

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Clitoral Gland
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lung
- * Mammary Gland
- * Parathyroid Gland
- * Spleen
- * Thyroid Gland

- * Bone
- * Esophagus
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Lymph Node, Bronchial
- * Nose
- * Pituitary Gland
- * Stomach, Forestomach
- * Trachea

- * Bone Marrow
- * Eye
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Larynx
- * Lymph Node, Mandibular
- * Ovary
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

- * Brain
- * Gallbladder
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Liver
- * Lymph Node, Mesenteric
- * Pancreas
- * Skin
- * Thymus
- * Uterus

MISSING

- * Adrenal Medulla
- * Lymph Node, Mediastinal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 108	TMT: 2	SEX: Female	DAY ON TEST: 96
	DOSE: 0 mg/m3	DISP: Terminal Sacrifice	HISTO: 55347

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Larynx |
| * Liver | * Lung | * Lymph Node, Bronchial | * 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 | | | |

MISSING

- * Lymph Node, Mediastinal
-

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	109	TMT:	2	SEX:	Female	DAY ON TEST:	96
		DOSE:	0 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55348

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Parathyroid Gland

OBSERVATIONS

* Kidney	Renal Tubule	Regeneration	Minimal
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TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	110	TMT:	2	SEX:	Female	DAY ON TEST:	96
		DOSE:	0 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55349

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- | | | |
|---------------|--------------------------|---------------------|
| * Gallbladder | * Lymph Node, Mandibular | * Parathyroid Gland |
|---------------|--------------------------|---------------------|

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	301	TMT:	4	SEX:	Female	DAY ON TEST:	96
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55440

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	302	TMT:	4	SEX:	Female	DAY ON TEST:	96
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55441

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	303	TMT:	4	SEX:	Female	DAY ON TEST:	96
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55442

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	304	TMT:	4	SEX:	Female	DAY ON TEST:	96
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55443

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	305	TMT:	4	SEX:	Female	DAY ON TEST:	96
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55444

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	306	TMT:	4	SEX:	Female	DAY ON TEST:	96
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55445

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	307	TMT:	4	SEX:	Female	DAY ON TEST:	96
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55446

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	308	TMT:	4	SEX:	Female	DAY ON TEST:	96
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55447

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	309	TMT:	4	SEX:	Female	DAY ON TEST:	96
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55448

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	310	TMT:	4	SEX:	Female	DAY ON TEST:	96
		DOSE:	25 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55449

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	501	TMT:	6	SEX:	Female	DAY ON TEST:	96
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55420

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole Perivascular	Hyperplasia Inflammation	Minimal Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Minimal Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	502	TMT:	6	SEX:	Female	DAY ON TEST:	96
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55421

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	503	TMT:	6	SEX:	Female	DAY ON TEST:	96
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55422

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	504	TMT:	6	SEX:	Female	DAY ON TEST:	96
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55423

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	505	TMT:	6	SEX:	Female	DAY ON TEST:	96
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55424

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	506	TMT:	6	SEX:	Female	DAY ON TEST:	96
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55425

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	507	TMT:	6	SEX:	Female	DAY ON TEST:	96
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55426

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	508	TMT:	6	SEX:	Female	DAY ON TEST:	96
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55427

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	509	TMT:	6	SEX:	Female	DAY ON TEST:	96
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55428

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Minimal Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	510	TMT:	6	SEX:	Female	DAY ON TEST:	96
		DOSE:	50 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55429

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Metaplasia	Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 701 TMT: 8
DOSE: 100 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55400

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Mild Squamous, Moderate
* Lung	Bronchiole Perivascular	Hyperplasia Inflammation	Mild Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Minimal Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 702 TMT: 8
DOSE: 100 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55401

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Mild Squamous, Moderate
* Lung	Bronchiole Perivascular	Hyperplasia Inflammation	Mild Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 703 TMT: 8
DOSE: 100 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55402

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Moderate
* Lung	Bronchiole Perivascular	Hyperplasia Inflammation	Mild Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 704	TMT: 8	SEX: Female	DAY ON TEST: 96
	DOSE: 100 mg/m3	DISP: Terminal Sacrifice	HISTO: 55403

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

Eye	Lens	Degeneration	Minimal
[Degeneration	TGLs = 1-11]		
* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Minimal Chronic Active, Minimal Squamous, Moderate
* Lung	Bronchiole Arteriole Perivascular	Hyperplasia Hypertrophy Inflammation	Mild Minimal Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 706 TMT: 8
DOSE: 100 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55405

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Moderate
* Lung	Bronchiole	Hyperplasia	Mild
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 707 TMT: 8
DOSE: 100 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55406

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Mild
* Lung	Bronchiole	Hyperplasia	Mild
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 708 TMT: 8
DOSE: 100 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55407

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Mild Squamous, Mild
* Lung	Bronchiole Arteriole	Hyperplasia Hypertrophy Infiltration Cellular	Mild Minimal Histiocyte, Minimal
	Perivascular	Inflammation	Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Minimal Minimal

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 709 TMT: 8
DOSE: 100 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55408

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Moderate
* Lung	Bronchiole	Hyperplasia	Mild
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 710 TMT: 8
DOSE: 100 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55409

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Trachea

OBSERVATIONS

* Larynx		Inflammation Metaplasia	Chronic Active, Minimal Squamous, Moderate
* Lung	Bronchiole	Hyperplasia	Mild
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	901	TMT:	10	SEX:	Female	DAY ON TEST:	96
		DOSE:	200 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55380

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Epiglottis Squam Epithel	Dysplasia Hyperplasia Inflammation Metaplasia	Minimal Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole Perivascular	Hyperplasia Inflammation	Mild Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	902	TMT:	10	SEX:	Female	DAY ON TEST:	96
		DOSE:	200 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55381

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Epiglottis Squam Epithel	Dysplasia Hyperplasia Inflammation Metaplasia	Minimal Mild Chronic Active, Moderate Squamous, Marked
* Lung	Bronchiole Perivascular	Hyperplasia Inflammation	Mild Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	903	TMT:	10	SEX:	Female	DAY ON TEST:	96
		DOSE:	200 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55382

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole Perivascular	Hyperplasia Inflammation	Mild Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	904	TMT:	10	SEX:	Female	DAY ON TEST:	96
		DOSE:	200 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55383

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole Arteriole Perivascular	Hyperplasia Hypertrophy Inflammation	Mild Minimal Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	905	TMT:	10	SEX:	Female	DAY ON TEST:	96
		DOSE:	200 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55384

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole Arteriole Perivascular	Hyperplasia Hypertrophy Inflammation	Mild Minimal Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 906 TMT: 10 DOSE: 200 mg/m3

SEX: Female DISP: Terminal Sacrifice

DAY ON TEST: 96 HISTO: 55385

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole Arteriole Perivascular	Hyperplasia Hypertrophy Inflammation	Mild Minimal Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	907	TMT:	10	SEX:	Female	DAY ON TEST:	96
		DOSE:	200 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55386

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole	Hyperplasia	Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 908 TMT: 10
DOSE: 200 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55387

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung	Bronchiole	Hyperplasia	Mild
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	909	TMT:	10	SEX:	Female	DAY ON TEST:	96
		DOSE:	200 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55388

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

Eye	[Degeneration	Lens TGLs = 1-11]	Degeneration	Mild
* Larynx		Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Marked
* Lung		Bronchiole Arteriole Perivascular	Hyperplasia Hypertrophy Inflammation	Mild Minimal Chronic Active, Minimal
* Nose		Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 910 TMT: 10
DOSE: 200 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55389

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Trachea

OBSERVATIONS

* Larynx	Squam Epithel	Hyperplasia Inflammation Metaplasia	Mild Chronic Active, Mild Squamous, Moderate
* Lung	Bronchiole Perivascular	Hyperplasia Inflammation	Minimal Chronic Active, Minimal
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Mild Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 1101	TMT: 12	SEX: Female	DAY ON TEST: 96
	DOSE: 400 mg/m3	DISP: Terminal Sacrifice	HISTO: 55360

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland | * Ovary |
| * Pancreas | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |

MISSING

- | | | |
|---------------|---------------------------|---------------------|
| * Gallbladder | * Lymph Node, Mediastinal | * Parathyroid Gland |
|---------------|---------------------------|---------------------|

OBSERVATIONS

- | | | | |
|----------|---------------------------------|--|---|
| * Larynx | Epiglottis
Squam Epithel | Dysplasia
Hyperplasia
Inflammation
Metaplasia | Minimal
Mild
Chronic Active, Mild
Squamous, Marked |
| * Lung | Bronchiole | Hyperplasia | Mild |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet | Mild
Mild |

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 1102	TMT: 12	SEX: Female	DAY ON TEST: 96
	DOSE: 400 mg/m3	DISP: Terminal Sacrifice	HISTO: 55361

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Gallbladder |
| * Harderian Gland | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland | * Ovary |
| * Pancreas | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |

MISSING

- | | | |
|------------------|---------------------------|---------------------|
| * Clitoral Gland | * Lymph Node, Mediastinal | * Parathyroid Gland |
|------------------|---------------------------|---------------------|

OBSERVATIONS

- | | | | |
|----------|---------------------------------|--|---|
| * Larynx | Epiglottis
Squam Epithel | Dysplasia
Hyperplasia
Inflammation
Metaplasia | Minimal
Mild
Chronic Active, Mild
Squamous, Marked |
| * Lung | Bronchiole
Perivascular | Hyperplasia
Inflammation | Mild
Chronic Active, Minimal |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet | Mild
Mild |

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 1103 TMT: 12
DOSE: 400 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55362

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mediastinal
- * Parathyroid Gland

OBSERVATIONS

- * Larynx
 - Epiglottis
 - Squam Epithel
 - * Lung
 - Bronchiole
 - * Nose
 - Respirat Epith
 - Olfactory Epi
- Dysplasia
 - Hyperplasia
 - Inflammation
 - Metaplasia
 - Hyperplasia
 - Accumulation, Hyaline Droplet
 - Accumulation, Hyaline Droplet
- Mild
 - Mild
 - Chronic Active, Mild
 - Squamous, Marked
 - Mild
 - Mild
 - Mild

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	1104	TMT:	12	SEX:	Female	DAY ON TEST:	96
		DOSE:	400 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55363

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * 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 | * Ovary |
| * Pancreas | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |

MISSING

- | | | |
|-------------------------|---------------------------|---------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mediastinal | * Parathyroid Gland |
|-------------------------|---------------------------|---------------------|

OBSERVATIONS

- | | | | |
|----------|---|--|--|
| * Larynx | Epiglottis
Squam Epithel | Dysplasia
Hyperplasia
Inflammation
Metaplasia | Mild
Mild
Chronic Active, Mild
Squamous, Marked |
| * Lung | Bronchiole
Arteriole
Perivascular | Hyperplasia
Hypertrophy
Inflammation | Mild
Minimal
Chronic Active, Minimal |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet | Mild
Mild |

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	1105	TMT:	12	SEX:	Female	DAY ON TEST:	96
		DOSE:	400 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55364

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- | | |
|---------------------------|---------------------|
| * Lymph Node, Mediastinal | * Parathyroid Gland |
|---------------------------|---------------------|

OBSERVATIONS

- | | | | |
|---------------------------|---------------------------------|--|--|
| * Intestine Large, Rectum | | Inflammation | Suppurative, Minimal |
| * Larynx | Epiglottis
Squam Epithel | Dysplasia
Hyperplasia
Inflammation
Metaplasia | Mild
Mild
Chronic Active, Mild
Squamous, Marked |
| * Lung | Bronchiole | Hyperplasia | Mild |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet | Mild
Mild |

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	1106	TMT:	12	SEX:	Female	DAY ON TEST:	96
		DOSE:	400 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55365

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * 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, Bronchial |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |

MISSING

- | | | |
|---------------|--------------------------|---------------------------|
| * Gallbladder | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
|---------------|--------------------------|---------------------------|

OBSERVATIONS

- | | | | |
|----------|---------------------------------|--|--|
| * Larynx | Epiglottis
Squam Epithel | Dysplasia
Hyperplasia
Inflammation
Metaplasia | Mild
Mild
Chronic Active, Mild
Squamous, Marked |
| * Lung | Bronchiole | Hyperplasia | Mild |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet | Mild
Mild |

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM:	1107	TMT:	12	SEX:	Female	DAY ON TEST:	96
		DOSE:	400 mg/m3	DISP:	Terminal Sacrifice	HISTO:	55366

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Gallbladder | * Harderian Gland | * 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, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Ovary | * Pancreas | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Urinary Bladder | * Uterus |

MISSING

- | | |
|-------------------------|---------------------|
| * Lymph Node, Bronchial | * Parathyroid Gland |
|-------------------------|---------------------|

OBSERVATIONS

- | | | | |
|-----------|---|--|--|
| * Larynx | Squam Epithel | Hyperplasia
Inflammation
Metaplasia | Mild
Chronic Active, Mild
Squamous, Marked |
| * Lung | Bronchiole
Arteriole
Perivascular | Hyperplasia
Hypertrophy
Inflammation | Mild
Minimal
Chronic Active, Minimal |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet | Mild
Mild |
| * Trachea | Epithelium | Metaplasia | Squamous, Minimal |

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/20/2008

Time Report Requested: 13:54:27

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

ANIMAL NUM: 1109 TMT: 12
DOSE: 400 mg/m3

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 55368

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Parathyroid Gland

INSUFFICIENT TISSUE

- * Lymph Node, Mediastinal

OBSERVATIONS

- | | | | |
|----------|---------------------------------|--|--|
| * Larynx | Epiglottis
Squam Epithel | Dysplasia
Hyperplasia
Inflammation
Metaplasia | Mild
Mild
Chronic Active, Mild
Squamous, Marked |
| * Lung | Bronchiole | Hyperplasia | Mild |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet | Mild
Mild |

