

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 804 TMT: 9
DOSE: 200 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53440

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 805 TMT: 9
 DOSE: 200 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53441

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 806 TMT: 9
DOSE: 200 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53442

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 807 TMT: 9
DOSE: 200 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53443

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 808 TMT: 9
DOSE: 200 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53444

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 809 TMT: 9
DOSE: 200 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53445

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 810 TMT: 9
DOSE: 200 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53446

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1001 TMT: 11
DOSE: 400 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53417

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mediastinal
- * Mammary Gland

OBSERVATIONS

- * Urinary Bladder
- Transit Epithe
- Hyperplasia
- Moderate

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1002 TMT: 11
DOSE: 400 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53418

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

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

OBSERVATIONS

- * Gallbladder
- * Urinary Bladder
- Transit Epithe
- Infiltration Cellular
- Hyperplasia
- Polymorphnuclr, Mild
- Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1003 TMT: 11
DOSE: 400 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53419

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

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

OBSERVATIONS

- * Kidney
- * Urinary Bladder
- Transit Epithe
- Nephropathy
- Hyperplasia
- Minimal
- Moderate

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1004 TMT: 11
DOSE: 400 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53420

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

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

OBSERVATIONS

- * Urinary Bladder
- Transit Epithe
- Hyperplasia
- Moderate

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1005 **TMT:** 11
DOSE: 400 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53421

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 | | | |

MISSING

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

OBSERVATIONS

- | | | | |
|-------------------|----------------|-------------|------|
| * Urinary Bladder | Transit Epithe | Hyperplasia | Mild |
|-------------------|----------------|-------------|------|

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1006 TMT: 11
DOSE: 400 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53422

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 | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thymus |
| * Thyroid Gland | * Trachea | | |

MISSING

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

OBSERVATIONS

- | | | | |
|-------------------|----------------|-------------|----------|
| * Urinary Bladder | Transit Epithe | Hyperplasia | Moderate |
|-------------------|----------------|-------------|----------|

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1007 TMT: 11
DOSE: 400 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53423

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lung
- * Pancreas
- * Salivary Glands
- * Stomach, Forestomach
- * Thyroid Gland

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

- * Bone
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Larynx
- * Lymph Node, Mesenteric
- * Preputial Gland
- * Skin
- * Testes

- * Bone Marrow
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Liver
- * Nose
- * Prostate
- * Spleen
- * Thymus

MISSING

- * Gallbladder
- * Parathyroid Gland

- * Lymph Node, Mandibular

- * Lymph Node, Mediastinal

- * Mammary Gland

OBSERVATIONS

- * Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1008 TMT: 11
DOSE: 400 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53424

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lung
- * Nose
- * Prostate
- * Spleen
- * Thymus

- * Adrenal Medulla
- * Epididymis
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Lymph Node, Bronchial
- * Pancreas
- * Salivary Glands
- * Stomach, Forestomach
- * Thyroid Gland

- * Bone
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Larynx
- * Lymph Node, Mediastinal
- * Pituitary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Trachea

- * Bone Marrow
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Liver
- * Lymph Node, Mesenteric
- * Preputial Gland
- * Skin
- * Testes

MISSING

- * Gallbladder

- * Lymph Node, Mandibular

- * Mammary Gland

- * Parathyroid Gland

OBSERVATIONS

- * Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1009 TMT: 11
DOSE: 400 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53425

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

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

OBSERVATIONS

- * Urinary Bladder
- Transit Epithe
- Hyperplasia
- Moderate

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1010 TMT: 11
DOSE: 400 ppm

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 95
HISTO: 53426

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular
- * Mammary Gland

OBSERVATIONS

- * Urinary Bladder
- Transit Epithe
- Hyperplasia
- Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 101 TMT: 2
DOSE: control

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53407

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Bronchial
- * Lymph Node, Mediastinal

OBSERVATIONS

- * Ovary [Teratoma Benign TGLs = 1-8] Teratoma Benign

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 102 TMT: 2
DOSE: control

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53408

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. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 103 TMT: 2
DOSE: control

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53409

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Bronchial
- * Parathyroid Gland

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 104 TMT: 2
DOSE: control

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53410

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mediastinal
- * Lymph Node, Mesenteric

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 105 TMT: 2
DOSE: control

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53411

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	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 106 TMT: 2
DOSE: control

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53412

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. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 107 TMT: 2
DOSE: control

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53413

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	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 108 TMT: 2
DOSE: control

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53414

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Bronchial

OBSERVATIONS

- * Kidney Nephropathy Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 109 TMT: 2
DOSE: control

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53415

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

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

OBSERVATIONS

- * Kidney Nephropathy Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 110 **TMT:** 2
DOSE: control

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53416

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. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 301 TMT: 4
DOSE: 25 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53507

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 302 TMT: 4
DOSE: 25 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53508

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 303 TMT: 4
DOSE: 25 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53509

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 304 TMT: 4
DOSE: 25 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53510

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 305 TMT: 4
DOSE: 25 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53511

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 306 TMT: 4
DOSE: 25 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53512

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 307 TMT: 4
DOSE: 25 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53513

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 308 TMT: 4
DOSE: 25 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53514

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 309 TMT: 4
DOSE: 25 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53515

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 310 TMT: 4
DOSE: 25 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53516

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 501 TMT: 6
DOSE: 50 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53487

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 502 TMT: 6
DOSE: 50 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53488

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 503 TMT: 6
DOSE: 50 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53489

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 504 TMT: 6
DOSE: 50 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53490

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 505 TMT: 6
 DOSE: 50 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53491

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 506 TMT: 6
DOSE: 50 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53492

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 507 TMT: 6
DOSE: 50 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53493

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM:	508	TMT:	6
		DOSE:	50 ppm

SEX:	Female
DISP:	Terminal Sacrifice

DAY ON TEST:	96
HISTO:	53494

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 509 TMT: 6
DOSE: 50 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53495

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Liver

* Urinary Bladder

OBSERVATIONS

Kidney

Nephropathy

Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 510 TMT: 6
 DOSE: 50 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53496

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 701 TMT: 8
DOSE: 100 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53467

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 702 TMT: 8
DOSE: 100 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53468

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 703 TMT: 8
DOSE: 100 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53469

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 704 TMT: 8
DOSE: 100 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53470

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 705 TMT: 8
DOSE: 100 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53471

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 706 TMT: 8
DOSE: 100 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53472

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 707 TMT: 8
DOSE: 100 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53473

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

* Urinary Bladder

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 708 TMT: 8
DOSE: 100 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53474

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 709 TMT: 8
DOSE: 100 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53475

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 710 TMT: 8
DOSE: 100 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53476

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 901 TMT: 10
DOSE: 200 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53447

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 902 TMT: 10
DOSE: 200 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53448

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM:	903	TMT:	10	SEX:	Female	DAY ON TEST:	96
		DOSE:	200 ppm	DISP:	Terminal Sacrifice	HISTO:	53449

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 904 TMT: 10
 DOSE: 200 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53450

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 905 TMT: 10
 DOSE: 200 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53451

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 906 TMT: 10
 DOSE: 200 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53452

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 907 TMT: 10
DOSE: 200 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53453

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 908 TMT: 10
DOSE: 200 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53454

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Minimal

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 909 TMT: 10
DOSE: 200 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53455

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM:	910	TMT:	10	SEX:	Female	DAY ON TEST:	96
		DOSE:	200 ppm	DISP:	Terminal Sacrifice	HISTO:	53456

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Kidney

Liver

OBSERVATIONS

* Urinary Bladder

Transit Epithe

Hyperplasia

Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1101 TMT: 12
DOSE: 400 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53427

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

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

OBSERVATIONS

- * Urinary Bladder
- Transit Epithe
- Hyperplasia
- Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1102 TMT: 12
DOSE: 400 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53428

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 | * Larynx | * Liver | * Lung |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Ovary | * Pancreas | * Pituitary Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Thymus | * Thyroid Gland | * Trachea | * Uterus |

MISSING

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

OBSERVATIONS

- | | | |
|----------------------|-------------------------------|---------|
| * Kidney | Nephropathy | Minimal |
| * Stomach, Glandular | Mineralization | Minimal |
| * Urinary Bladder | Transit Epithe
Hyperplasia | Mild |

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1103 TMT: 12
DOSE: 400 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53429

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

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

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

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

MISSING

- * Clitoral Gland
- * Lymph Node, Mediastinal

OBSERVATIONS

* Urinary Bladder Transit Epithe Hyperplasia Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1104 TMT: 12
DOSE: 400 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53430

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Gallbladder
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Liver
- * Lymph Node, Mediastinal
- * Ovary
- * Salivary Glands
- * Stomach, Glandular
- * Uterus

- * Adrenal Medulla
- * Clitoral Gland
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lung
- * Lymph Node, Mesenteric
- * Pancreas
- * Skin
- * Thymus

- * Bone
- * Esophagus
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Lymph Node, Bronchial
- * Mammary Gland
- * Parathyroid Gland
- * Spleen
- * Thyroid Gland

- * Bone Marrow
- * Eye
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Larynx
- * Lymph Node, Mandibular
- * Nose
- * Pituitary Gland
- * Stomach, Forestomach
- * Trachea

OBSERVATIONS

* Urinary Bladder Transit Epithe Hyperplasia Moderate

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1105 TMT: 12
DOSE: 400 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53431

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mediastinal

OBSERVATIONS

* Urinary Bladder Transit Epithe Hyperplasia Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1106 TMT: 12
DOSE: 400 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53432

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

- * Adrenal Medulla
- * 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
- * Uterus

MISSING

- * Lymph Node, Mediastinal

OBSERVATIONS

- * Urinary Bladder Transit Epithe Hyperplasia Moderate

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1108 TMT: 12
DOSE: 400 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53434

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

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

OBSERVATIONS

- | | | | |
|-------------------|----------------|-------------|--------|
| * Lung | Alveolar Epith | Hyperplasia | Marked |
| * Urinary Bladder | Transit Epithe | Hyperplasia | Mild |

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1109 TMT: 12
DOSE: 400 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53435

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	* Uterus

MISSING

* Parathyroid Gland

OBSERVATIONS

* Urinary Bladder Transit Epithe Hyperplasia Mild

TDMS No. 20302 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

ALPHA-PINENE

CAS Number: 80-56-8

Pathologist: GRUMBEIN, S. - LIEUALLEN, W.

Date Report Requested: 11/17/2006

Time Report Requested: 07:28:41

First Dose M/F: 03/28/05 / 03/28/05

Lab: BNW

ANIMAL NUM: 1110 TMT: 12
DOSE: 400 ppm

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 96
HISTO: 53436

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

INSUFFICIENT TISSUE

- * Lymph Node, Bronchial

OBSERVATIONS

* Urinary Bladder	Transit Epithe	Hyperplasia	Mild
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*** END OF REPORT ***