

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

F2_Rev. 1_RE

NTP Study Number: C20701
Lock Date: 02/24/2009
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 3.0.1.1_001
PWG Approval Date: NONE

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1001

TRT#: 1

SEX: Male

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56369

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* 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	* 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

OBSERVATIONS

* Lung

Inflammation

Chronic Active, Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1002

TRT#: 1

SEX: Male

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56370

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* 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	* 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

* Mammary Gland

OBSERVATIONS

* Lymph Node, Mediastinal Pigmentation Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1003

TRT#: 1

SEX: Male

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56371

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* 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	* 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, Mediastinal	* Parathyroid Gland
---------------------------	---------------------

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1004

TRT#: 1

SEX: Male

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56372

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* 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	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Harderian Gland	Inflammation	Chronic Active, Minimal
* Lymph Node, Mediastinal	Pigmentation	Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1005

TRT#: 1

SEX: Male

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56373

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* 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, 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, Bronchial	* Mammary Gland
-------------------------	-----------------

OBSERVATIONS

* Lymph Node, Mediastinal	Pigmentation	Minimal
---------------------------	--------------	---------

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1006

TRT#: 1

SEX: Male

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56374

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* 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	* 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

* Mammary Gland

OBSERVATIONS

* Heart	Cardiomyopathy	Minimal
---------	----------------	---------

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1007

TRT#: 1

SEX: Male

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56375

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* 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, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary 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

* Lung	Infiltration Cellular	Histiocyte, Minimal
* Preputial Gland	Inflammation	Chronic Active, Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1008

TRT#: 1

SEX: Male

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56376

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* 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	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Lymph Node, Mediastinal	Pigmentation	Minimal
* Preputial Gland	Inflammation	Chronic Active, Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1009

TRT#: 1

SEX: Male

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56377

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* 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, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary 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

* Preputial Gland	Inflammation	Chronic Active, Minimal
-------------------	--------------	-------------------------

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1010

TRT#: 1

SEX: Male

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56378

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* 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	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Harderian Gland	Inflammation	Chronic Active, Minimal
* Kidney	Infarct	Minimal

[Infarct TGLs = 1-14]

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1201

TRT#: 3

SEX: Male

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56389

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lymph Node, Mediastinal

Testes

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Infiltration Cellular
Inflammation
Pigmentation

Histiocyte, Minimal
Chronic Active, Minimal
Minimal

[Inflammation TGLs = 1-4+5]

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1202

TRT#: 3

SEX: Male

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56390

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lung

* Lymph Node, Mediastinal

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

Testes

Germinal Epith

Degeneration

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1203

TRT#: 3

SEX: Male

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56391

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

Testes

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Inflammation

Chronic Active, Minimal

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1204

TRT#: 3

SEX: Male

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56392

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

Testes

OBSERVATIONS

* Lung

Inflammation

Chronic Active, Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1205

TRT#: 3

SEX: Male

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56393

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lung

Testes

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1206

TRT#: 3

SEX: Male

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56394

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

Testes

OBSERVATIONS

* Lung

Congestion
Inflammation

Mild
Chronic Active, Minimal

[Congestion TGLs = 1-4]

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1207

TRT#: 3

SEX: Male

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56395

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lung

* Lymph Node, Bronchial

Testes

OBSERVATIONS

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1208

TRT#: 3

SEX: Male

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56396

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lung

* Lymph Node, Bronchial

Testes

MISSING

* Lymph Node, Mediastinal

OBSERVATIONS

Liver

Inflammation

Chronic, Mild

[Inflammation TGLs = 1-7]

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1209

TRT#: 3

SEX: Male

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56397

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lymph Node, Mediastinal

Testes

OBSERVATIONS

* Lung

Hemorrhage

Minimal

* Lymph Node, Bronchial

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1210

TRT#: 3

SEX: Male

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56398

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lung

Testes

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1401

TRT#: 5

SEX: Male

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56409

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung	Inflammation	Chronic Active, Mild
Note: NO CORRELATING LESION FOR TGL 1.		
* Lymph Node, Mediastinal	Pigmentation	Mild
Testes	Germinal Epith Degeneration	Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1402

TRT#: 5

SEX: Male

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56410

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lymph Node, Mediastinal

Testes

OBSERVATIONS

* Lung

Infiltration Cellular

Histiocyte, Minimal

Inflammation

Chronic Active, Minimal

Pigmentation

Mild

[Pigmentation TGLs = 1-4+5]

* Lymph Node, Bronchial

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1403

TRT#: 5

SEX: Male

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56411

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

Testes

MISSING

* Lymph Node, Mediastinal

OBSERVATIONS

* Lung

Infiltration Cellular

Histiocyte, Minimal

Inflammation

Chronic Active, Minimal

Pigmentation

Mild

[Pigmentation TGLs = 1-4+5]

* Lymph Node, Bronchial

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1404

TRT#: 5

SEX: Male

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56412

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lymph Node, Mediastinal

Testes

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Infiltration Cellular
Pigmentation

Histiocyte, Minimal
Mild

[Pigmentation TGLs = 1-4+5]

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1405

TRT#: 5

SEX: Male

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56413

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lymph Node, Mediastinal

Testes

OBSERVATIONS

* Lung

Infiltration Cellular

Histiocyte, Mild

Inflammation

Chronic Active, Mild

Pigmentation

Moderate

[Pigmentation TGLs = 1-4+5]

* Lymph Node, Bronchial

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1406

TRT#: 5

SEX: Male

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56414

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Note: NO CORRELATING LESION FOR TGL 1.

* Lymph Node, Mediastinal

Pigmentation

Minimal

Testes

Germinal Epith

Degeneration

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1407

TRT#: 5

SEX: Male

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56415

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lymph Node, Bronchial

Testes

MISSING

* Lymph Node, Mediastinal

OBSERVATIONS

* Lung

Infiltration Cellular
Inflammation
Pigmentation

Histiocyte, Minimal
Chronic Active, Mild
Mild

[Pigmentation TGLs = 1-4+5]

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1408

TRT#: 5

SEX: Male

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56416

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

Testes

OBSERVATIONS

* Lung

Infiltration Cellular

Histiocyte, Mild

Inflammation

Chronic Active, Mild

Pigmentation

Mild

[Pigmentation TGLs = 1-4+5]

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1409

TRT#: 5

SEX: Male

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56417

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Epididymis

Testes

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Infiltration Cellular

Histiocyte, Mild

Inflammation

Chronic Active, Mild

Pigmentation

Mild

[Pigmentation TGLs = 1-4+5]

* Lymph Node, Mediastinal

Pigmentation

Mild

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1410

TRT#: 5

SEX: Male

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56418

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

OBSERVATIONS

Epididymis

Hypospermia

Marked

* Lung

Hemorrhage

Mild

Infiltration Cellular

Histiocyte, Minimal

Inflammation

Chronic Active, Mild

Pigmentation

Mild

[Pigmentation TGLs = 1-4+5]

Testes

Germinal Epith

Degeneration

Marked

Interstit Cell

Hyperplasia

Mild

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1601

TRT#: 7

SEX: Male

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56429

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Pancreas | * Pituitary Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|-------------------------------|--|-----------------------|-------------------------|
| * Lung | | Infiltration Cellular | Histiocyte, Marked |
| | | Inflammation | Chronic Active, Mild |
| | | Pigmentation | Marked |
| [Pigmentation TGLs = 1-4+5] | | | |
| * Lymph Node, Bronchial | | Pigmentation | Minimal |
| * Preputial Gland | | Inflammation | Chronic Active, Minimal |

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1602

TRT#: 7

SEX: Male

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56430

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* 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, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

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

OBSERVATIONS

* Lung	Infiltration Cellular	Histiocyte, Marked
	Inflammation	Chronic Active, Mild
	Pigmentation	Moderate

[Pigmentation TGLs = 1-4+5]

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1603

TRT#: 7

SEX: Male

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56431

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

- * Mammary Gland

OBSERVATIONS

- | | | | |
|-------------------------------|-------------|---|--|
| * Lung | | Infiltration Cellular
Inflammation
Pigmentation | Histiocyte, Marked
Chronic Active, Mild
Marked |
| [Pigmentation TGLs = 1-4+5] | | | |
| * Lymph Node, Bronchial | | Pigmentation | Minimal |
| * Nose | Goblet Cell | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Chronic Active, Minimal |
| * Prostate | | Inflammation | Chronic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1604

TRT#: 7

SEX: Male

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56432

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * 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 |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Nose | * Pancreas |
| * Parathyroid Gland | * Pituitary 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

- | | | |
|-------------------------------|-----------------------|-------------------------|
| * Liver | Inflammation | Chronic Active, Minimal |
| * Lung | Infiltration Cellular | Histiocyte, Marked |
| | Inflammation | Chronic Active, Mild |
| | Pigmentation | Moderate |
| [Pigmentation TGLs = 1-4+5] | | |
| * Lymph Node, Mediastinal | Pigmentation | Mild |
| * Preputial Gland | Inflammation | Chronic Active, Minimal |

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1605

TRT#: 7

SEX: Male

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56433

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* 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
* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Pituitary Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Mammary Gland	* Parathyroid Gland
-----------------	---------------------

OBSERVATIONS

* Kidney	Nephropathy	Minimal
* Lung	Infiltration Cellular	Histiocyte, Moderate
	Inflammation	Chronic Active, Mild
	Pigmentation	Moderate
[Pigmentation TGLs = 1-4+5]		
* Preputial Gland	Inflammation	Chronic Active, Minimal

Experiment Number: 20701 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE NASAL
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Nanoscale material (Fullerene-C60 1 micron)
 CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
 Time Report Requested: 07:44:39
 First Dose M/F: 11/05/07 / 11/05/07
 Lab: BNW

ANIMAL ID: 1606

TRT#: 7

SEX: Male

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56434

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * 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, Mandibular | * Lymph Node, Mesenteric | * Nose |
| * Pancreas | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

- | | |
|-----------------|---------------------|
| * Mammary Gland | * Parathyroid Gland |
|-----------------|---------------------|

OBSERVATIONS

- | | | |
|-------------------------------|-----------------------|-------------------------|
| * Lung | Hemorrhage | Mild |
| | Infiltration Cellular | Histiocyte, Marked |
| | Inflammation | Chronic Active, Mild |
| | Pigmentation | Moderate |
| [Pigmentation TGLs = 1-4+5] | | |
| * Lymph Node, Bronchial | Pigmentation | Moderate |
| * Lymph Node, Mediastinal | Pigmentation | Minimal |
| * Preputial Gland | Inflammation | Chronic Active, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1607

TRT#: 7

SEX: Male

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56435

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * 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 |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|---------------------------|-------------------------------|-----------------------|----------------------|
| * Kidney | | Nephropathy | Minimal |
| * Lung | | Infiltration Cellular | Histiocyte, Marked |
| | | Inflammation | Chronic Active, Mild |
| | | Pigmentation | Moderate |
| | [Pigmentation TGLs = 1-4+5] | | |
| * Lymph Node, Bronchial | | Pigmentation | Mild |
| * Lymph Node, Mediastinal | | Pigmentation | Minimal |

Experiment Number: 20701 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE NASAL
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Nanoscale material (Fullerene-C60 1 micron)
 CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
 Time Report Requested: 07:44:39
 First Dose M/F: 11/05/07 / 11/05/07
 Lab: BNW

ANIMAL ID: 1608

TRT#: 7

SEX: Male

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56436

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * 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, 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 | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- * Mammary Gland

OBSERVATIONS

- | | | | |
|-------------------------------|----------------|-----------------------|----------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Lung | | Hemorrhage | Minimal |
| | | Infiltration Cellular | Histiocyte, Marked |
| | | Inflammation | Chronic Active, Mild |
| | | Pigmentation | Moderate |
| [Pigmentation TGLs = 1-4+5] | | | |
| * Lymph Node, Bronchial | | Pigmentation | Mild |
| * Testes | Germinal Epith | Degeneration | Minimal |

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1609

TRT#: 7

SEX: Male

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56437

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * 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 |
| * 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

- * Mammary Gland

OBSERVATIONS

- | | | | |
|-------------------------------|--------|-----------------------|----------------------|
| * Kidney | Pelvis | Dilatation | Mild |
| [Dilatation TGLs = 2-7] | | | |
| * Lung | | Infiltration Cellular | Histiocyte, Marked |
| | | Inflammation | Chronic Active, Mild |
| | | Pigmentation | Moderate |
| [Pigmentation TGLs = 1-4+5] | | | |
| * Lymph Node, Bronchial | | Pigmentation | Mild |
| * Lymph Node, Mediastinal | | Pigmentation | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1610

TRT#: 7

SEX: Male

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56438

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* 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, Mandibular	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Mammary Gland

INSUFFICIENT TISSUE

* Skin

OBSERVATIONS

* Eye	Inflammation	Chronic Active, Minimal
* Lung	Hemorrhage	Mild
	Infiltration Cellular	Histiocyte, Moderate
	Inflammation	Chronic Active, Mild
	Pigmentation	Moderate
[Pigmentation TGLs = 1-4+5]		
* Lymph Node, Bronchial	Pigmentation	Mild
* Lymph Node, Mediastinal	Pigmentation	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1101

TRT#: 2

SEX: Female

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56379

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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, Mandibular	* Lymph Node, Mediastinal
* 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, Bronchial

OBSERVATIONS

* Lymph Node, Mesenteric

Infiltration Cellular

Histiocyte, Mild

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1102

TRT#: 2

SEX: Female

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56380

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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, 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			

OBSERVATIONS

* Lymph Node, Bronchial

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1103

TRT#: 2

SEX: Female

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56381

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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		

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1104

TRT#: 2

SEX: Female

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56382

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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
* 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, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Clitoral Gland	Inflammation	Chronic Active, Minimal
* Stomach, Forestomach	Hyperplasia	Squamous, Mild

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1105

TRT#: 2

SEX: Female

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56383

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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, 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, Bronchial	* Lymph Node, Mediastinal
-------------------------	---------------------------

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1106

TRT#: 2

SEX: Female

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56384

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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
* 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

INSUFFICIENT TISSUE

* Lymph Node, Mediastinal

OBSERVATIONS

* Clitoral Gland

Inflammation

Chronic Active, Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1107

TRT#: 2

SEX: Female

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56385

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Parathyroid Gland

OBSERVATIONS

* Kidney	Nephropathy	Minimal
* Lymph Node, Mediastinal	Pigmentation	Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1108

TRT#: 2

SEX: Female

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56386

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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		

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1109

TRT#: 2

SEX: Female

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56387

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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	* 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, Bronchial

OBSERVATIONS

* Lung	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mediastinal	Pigmentation	Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1110

TRT#: 2

SEX: Female

DAY ON TEST: 89

DOSE: 0 mg/m3

DISP: Terminal Sacrifice

HISTO: 56388

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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, 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, Bronchial

OBSERVATIONS

* Lymph Node, Mediastinal	Pigmentation	Minimal
---------------------------	--------------	---------

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1301

TRT#: 4

SEX: Female

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56399

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lung

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1302

TRT#: 4

SEX: Female

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56400

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lung

* Lymph Node, Bronchial

OBSERVATIONS

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1303

TRT#: 4

SEX: Female

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56401

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lung

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1304

TRT#: 4

SEX: Female

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56402

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lung

* Lymph Node, Mediastinal

MISSING

* Lymph Node, Bronchial

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1305

TRT#: 4

SEX: Female

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56403

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lung

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1306

TRT#: 4

SEX: Female

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56404

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lung

* Lymph Node, Bronchial

OBSERVATIONS

* Lymph Node, Mediastinal

Pigmentation

Mild

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1307

TRT#: 4

SEX: Female

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56405

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lung

OBSERVATIONS

* Lymph Node, Bronchial

Pigmentation

Minimal

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1308

TRT#: 4

SEX: Female

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56406

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lung

* Lymph Node, Bronchial

OBSERVATIONS

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1309

TRT#: 4

SEX: Female

DAY ON TEST: 89

DOSE: 2 mg/m3

DISP: Terminal Sacrifice

HISTO: 56407

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lung

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1310

TRT#: 4

SEX: Female

DAY ON TEST: 88

DOSE: 2 mg/m3

DISP: Moribund Sacrifice

HISTO: 56408

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	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	Parathyroid Gland	Pituitary Gland	Salivary Glands
Skin	Spleen	Stomach, Forestomach	Stomach, Glandular
Thyroid Gland	Trachea	Urinary Bladder	Uterus

OBSERVATIONS

Bone	Inflammation	Chronic Active, Marked
[Inflammation TGLs = 1-14]		
Clitoral Gland	Inflammation	Chronic Active, Minimal
* Lung	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mediastinal	Pigmentation	Minimal
Thymus	Necrosis	Moderate

PRIMARY CAUSE OF DEATH - Bone Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1501

TRT#: 6

SEX: Female

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56419

ORGAN AND ACCOUNTABLE SITE STATUS

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Infiltration Cellular

Histiocyte, Minimal

Pigmentation

Mild

[Pigmentation TGLs = 1-4+5]

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1502

TRT#: 6

SEX: Female

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56420

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Infiltration Cellular
Pigmentation

Histiocyte, Minimal
Mild

[Pigmentation TGLs = 1-4+5]

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1503

TRT#: 6

SEX: Female

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56421

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lung

MISSING

* Lymph Node, Bronchial

INSUFFICIENT TISSUE

* Lymph Node, Mediastinal

OBSERVATIONS

* Lung

Note: NO CORRELATING LESION FOR TGL 1.

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1504

TRT#: 6

SEX: Female

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56422

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Infiltration Cellular

Histiocyte, Minimal

Pigmentation

Mild

[Pigmentation TGLs = 1-4+5]

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1505

TRT#: 6

SEX: Female

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56423

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lung

OBSERVATIONS

* Lung

Note: NO CORRELATING LESION FOR TGL 1.

* Lymph Node, Bronchial

Pigmentation

Mild

* Lymph Node, Mediastinal

Pigmentation

Mild

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1506

TRT#: 6

SEX: Female

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56424

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Bronchial

INSUFFICIENT TISSUE

* Lymph Node, Mediastinal

OBSERVATIONS

* Lung

Infiltration Cellular
Inflammation
Pigmentation

Histiocyte, Minimal
Chronic Active, Minimal
Mild

[Pigmentation TGLs = 1-4+5]

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1507

TRT#: 6

SEX: Female

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56425

OBSERVATIONS

* Lung

Infiltration Cellular
Pigmentation

Histiocyte, Minimal
Mild

[Pigmentation TGLs = 1-4+5]

* Lymph Node, Bronchial

Pigmentation

Minimal

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1508

TRT#: 6

SEX: Female

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56426

OBSERVATIONS

* Lung

Infiltration Cellular
Pigmentation

Histiocyte, Minimal
Moderate

[Pigmentation TGLs = 1-4+5]

* Lymph Node, Bronchial

Pigmentation

Minimal

* Lymph Node, Mediastinal

Pigmentation

Mild

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1509

TRT#: 6

SEX: Female

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56427

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

OBSERVATIONS

* Lung

Infiltration Cellular
Pigmentation

Histiocyte, Minimal
Moderate

[Pigmentation TGLs = 1-4+5]

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1510

TRT#: 6

SEX: Female

DAY ON TEST: 89

DOSE: 15 mg/m3

DISP: Terminal Sacrifice

HISTO: 56428

ORGAN AND ACCOUNTABLE SITE STATUS

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Infiltration Cellular

Histiocyte, Minimal

Pigmentation

Mild

[Pigmentation TGLs = 1-4+5]

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1701

TRT#: 8

SEX: Female

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56439

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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	* 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, Bronchial	* Lymph Node, Mediastinal
-------------------------	---------------------------

OBSERVATIONS

* Lung	Infiltration Cellular	Histiocyte, Marked
	Inflammation	Chronic Active, Mild
	Pigmentation	Moderate

[Pigmentation TGLs = 1-4+5]

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1702

TRT#: 8

SEX: Female

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56440

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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	* 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

OBSERVATIONS

* Lung		Infiltration Cellular	Histiocyte, Marked
		Inflammation	Chronic Active, Mild
		Pigmentation	Marked
[Pigmentation TGLs = 1-4+5]			
* Lymph Node, Bronchial		Pigmentation	Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1703

TRT#: 8

SEX: Female

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56441

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * 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 | |

OBSERVATIONS

- | | | | |
|-------------------------------|--|---|--|
| * Lung | | Infiltration Cellular
Inflammation
Pigmentation | Histiocyte, Marked
Chronic Active, Mild
Moderate |
| [Pigmentation TGLs = 1-4+5] | | | |
| * Lymph Node, Bronchial | | Pigmentation | Mild |
| * Lymph Node, Mediastinal | | Pigmentation | Moderate |

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1704

TRT#: 8

SEX: Female

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56442

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * Larynx | * Liver | * 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 | | | |

OBSERVATIONS

- | | | | |
|---------------------------|-------------------------------|-----------------------|-------------------------|
| * Clitoral Gland | | Inflammation | Chronic Active, Minimal |
| * Kidney | Pelvis | Dilatation | Mild |
| | | Nephropathy | Minimal |
| | [Dilatation TGLs = 2-7] | | |
| * Lung | | Infiltration Cellular | Histiocyte, Marked |
| | | Inflammation | Chronic Active, Mild |
| | | Pigmentation | Moderate |
| | [Pigmentation TGLs = 1-4+5] | | |
| * Lymph Node, Bronchial | | Pigmentation | Minimal |
| * Lymph Node, Mediastinal | | Pigmentation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1705

TRT#: 8

SEX: Female

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56443

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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	* 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	* Urinary Bladder
* Uterus			

MISSING

* Parathyroid Gland

OBSERVATIONS

* Clitoral Gland		Inflammation	Chronic Active, Minimal
* Liver	Hepatocyte	Pigmentation	Moderate
* Lung		Infiltration Cellular	Histiocyte, Marked
		Inflammation	Chronic Active, Mild
		Pigmentation	Moderate
[Pigmentation TGLs = 1-4+5]			
* Lymph Node, Mediastinal		Pigmentation	Mild

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1706

TRT#: 8

SEX: Female

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56444

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* 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, 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

* Adrenal Medulla	* Lymph Node, Bronchial
-------------------	-------------------------

OBSERVATIONS

* Clitoral Gland	Inflammation	Chronic Active, Minimal
* Lung	Infiltration Cellular	Histiocyte, Marked
	Inflammation	Chronic Active, Mild
	Pigmentation	Moderate
[Pigmentation TGLs = 1-4+5]		
* Lymph Node, Mediastinal	Pigmentation	Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1707

TRT#: 8

SEX: Female

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56445

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * 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 | |

OBSERVATIONS

- | | | | |
|-------------------------------|--|---|--|
| * Lung | | Infiltration Cellular
Inflammation
Pigmentation | Histiocyte, Marked
Chronic Active, Mild
Marked |
| [Pigmentation TGLs = 2-4+5] | | | |
| * Lymph Node, Bronchial | | Pigmentation | Mild |
| * Lymph Node, Mediastinal | | Pigmentation | Mild |
| [Pigmentation TGLs = 1-3] | | | |

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1708

TRT#: 8

SEX: Female

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56446

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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	* 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, Bronchial

OBSERVATIONS

* Lung	Infiltration Cellular Inflammation Pigmentation	Histiocyte, Marked Chronic Active, Mild Moderate
[Pigmentation TGLs = 1-4+5]		
* Lymph Node, Mediastinal	Pigmentation	Minimal

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1709

TRT#: 8

SEX: Female

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56447

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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	* 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

* Lymph Node, Bronchial

OBSERVATIONS

* Lung	Infiltration Cellular	Histiocyte, Marked
	Inflammation	Chronic Active, Mild
	Pigmentation	Moderate

[Pigmentation TGLs = 1-4+5]

Experiment Number: 20701 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE NASAL
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Nanoscale material (Fullerene-C60 1 micron)
CAS Number: 99685-96-8

Date Report Requested: 02/21/2013
Time Report Requested: 07:44:39
First Dose M/F: 11/05/07 / 11/05/07
Lab: BNW

ANIMAL ID: 1710

TRT#: 8

SEX: Female

DAY ON TEST: 89

DOSE: 30 mg/m3

DISP: Terminal Sacrifice

HISTO: 56448

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* 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
* 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, Bronchial

OBSERVATIONS

* Kidney	Mineralization	Minimal
* Lung	Infiltration Cellular	Histiocyte, Marked
	Inflammation	Chronic Active, Mild
	Pigmentation	Moderate
[Pigmentation TGLs = 1-4+5]		
* Lymph Node, Mediastinal	Pigmentation	Minimal

*** END OF REPORT ***