

複層カーボンナノチューブ（MWCNT）の
ラットを用いた吸入によるがん原性試験報告書

試験番号：0800

APPENDICES

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APPENDIX 1 ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER
IN THE 2-YEAR INHALATION STUDY OF MULTI-WALL
CARBON NANOTUBE

APPENDIX 2 METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY
AND BIOCHEMISTRY IN THE 2-YEAR INHALATION STUDY OF
MULTI-WALL CARBON NANOTUBE

APPENDIX 1

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-YEAR INHALATION STUDY OF MULTI-WALL CARBON NANOTUBE

APPENDIX 1 ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER
IN THE 2-YEAR INHALATION STUDY OF MULTU-WALL
CARBON NANOTUBE

| Group Name | Temperature (°C) Mean ± S.D. | Humidity (%) Mean ± S.D. | Ventilation Rate (L/min) Mean ± S.D. | Air Change (time/h) Mean |
|------------------------|------------------------------------|--------------------------------|--|--------------------------------|
| Control | 23.0 ± 0.2 | 53.8 ± 1.8 | 1670.1 ± 36.8 | 10.0 |
| 0.02 mg/m ³ | 22.9 ± 0.1 | 52.9 ± 2.4 | 1670.8 ± 36.1 | 10.0 |
| 0.2 mg/m ³ | 23.0 ± 0.2 | 53.3 ± 2.1 | 1671.2 ± 36.6 | 10.0 |
| 2 mg/m ³ | 23.0 ± 0.2 | 52.7 ± 2.0 | 1667.8 ± 38.2 | 10.0 |

APPENDIX 2

METHODS, UNITS AND DECIMAL PLACE FOR
HEMATOLOGY AND BIOCHEMISTRY
IN THE 2-YEAR INHALATION STUDY OF
MULTI-WALL CARBON NANOTUBE

**APPENDIX 2 METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND
BIOCHEMISTRY IN THE 2-YEAR INHALATION STUDY
OF MULTI-WALL CARBON NANOTUBE**

| Item | Method | Unit | Decimal place |
|--|---|---------------------------|---------------|
| Hematology | | | |
| Red blood cell (RBC) | Light scattering method ¹⁾ | $\times 10^6/\mu\text{L}$ | 2 |
| Hemoglobin(Hgb) | Cyanmethemoglobin method ¹⁾ | g/dL | 1 |
| Hematocrit(Hct) | Calculated as $\text{RBC} \times \text{MCV}/10$ ¹⁾ | % | 1 |
| Mean corpuscular volume(MCV) | Light scattering method ¹⁾ | fL | 1 |
| Mean corpuscular hemoglobin(MCH) | Calculated as $\text{Hgb}/\text{RBC} \times 10$ ¹⁾ | pg | 1 |
| Mean corpuscular hemoglobin concentration (MCHC) | Calculated as $\text{Hgb}/\text{Hct} \times 100$ ¹⁾ | g/dL | 1 |
| Platelet | Light scattering method ¹⁾ | $\times 10^3/\mu\text{L}$ | 0 |
| Reticulocyte | Light scattering method ¹⁾ | % | 1 |
| White blood cell(WBC) | Light scattering method ¹⁾ | $\times 10^3/\mu\text{L}$ | 2 |
| Differential WBC | Light scattering method ¹⁾ | % | 0 |
| Biochemistry | | | |
| Total protein(TP) | Biuret method ²⁾ | g/dL | 1 |
| Albumin (Alb) | BCG method ²⁾ | g/dL | 1 |
| A/G ratio | Calculated as $\text{Alb}/(\text{TP} - \text{Alb})$ ²⁾ | - | 1 |
| T-bilirubin | BOD method ²⁾ | mg/dL | 2 |
| Glucose | GlcK•G-6-PDH method ²⁾ | mg/dL | 0 |
| T-cholesterol | CE•COD•POD method ²⁾ | mg/dL | 0 |
| Triglyceride | MGLP•GK•GPO•POD method ²⁾ | mg/dL | 0 |
| Phospholipid | PLD•ChOD•POD method ²⁾ | mg/dL | 0 |
| Aspartate aminotransferase (AST) | JSCC method ²⁾ | U/L | 0 |
| Alanine aminotransferase (ALT) | JSCC method ²⁾ | U/L | 0 |
| Lactate dehydrogenase (LDH) | JSCC method ²⁾ | U/L | 0 |
| Alkaline phosphatase (ALP) | JSCC method ²⁾ | U/L | 0 |
| -Glutamyl transpeptidase (-GTP) | JSCC method ²⁾ | U/L | 1 |
| Creatine kinase (CK) | JSCC method ²⁾ | U/L | 0 |
| Urea nitrogen | Urease•GLDH method ²⁾ | mg/dL | 1 |
| Creatinine | Creatinase•SOD•POD method ²⁾ | mg/dL | 2 |
| Sodium | Ion selective electrode method ²⁾ | mEq/L | 0 |
| Potassium | Ion selective electrode method ²⁾ | mEq/L | 1 |
| Chloride | Ion selective electrode method ²⁾ | mEq/L | 0 |
| Calcium | OCPC method ²⁾ | mg/dL | 1 |
| Inorganic phosphorus | PNP•XOD•POD method ²⁾ | mg/dL | 1 |

1) Automatic blood cell analyzer (ADVIA120 : Siemens Healthcare Diagnostics Inc.)

2) Automatic analyzer (Hitachi 7080 : Hitachi,Ltd.)