

MATERIAL SAFETY DATA SHEET

Page 1 of 6 MSDS #: TN1094-0101

Product Code: 1384A / F42-1932, SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING **Product Name:** Canon NPG-13A Black Toner 1384A / F42-1932, F42-2221 Product Code: Canon Inc.30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan, Phone # 03-3758-2111 Manufacturer: Canon USA, Inc., One Canon Plaza, Lake Success, NY 11042, USA Supplier: Phone #: 1-800-OK-CANON, 24 Hr. Emergency CHEMTREC # 1-800-424-9300 **SECTION 2** COMPOSITION/INFORMATION ON INGREDIENTS < Ingredient(s) > Chemical Name / CAS#/ Weight EU Symbol/ USA ACGIH TLV EU ILV DFG MAK EC# R-Phrase OSHA PEL Generic name Confidential 50-60 None/ None Not established Not established Not established Not established Styrene acrylate copolymer Iron oxide 1317-61-9/ 40-50 None/ None Not established Not established Not established Not established 215-277-5 < Carcinogen > CAS# Reference No component of this toner is listed as a human carcinogen or a potential carcinogen in IARC Monographs, NTP, OSHA regulations or Annex 1 to Directive 67/548/EEC **SECTION 3** HAZARDS IDENTIFICATION **EU Classification:** Not classified as dangerous. **Emergency Overview:** Black fine powder, slight plastic odor. Potential Health Effects and Symptoms: Inhalation: Exposure to excessive amounts of dust may cause physical irritation to respiratory tract. Ingestion: Practically non-toxic. Ingestion is a minor route of entry for intended use of this product. Eye: May cause transient slight irritation. Skin: May be non-irritant. Chronic Effects: Prolonged inhalation of excessive amounts of dust may cause lung damage. Use of this product as intended does not result in inhalation of excessive amounts of dust.

Not determined

Medical Conditions Generally known to be Aggravated by Exposure:

Canon

MATERIAL SAFETY DATA SHEET

MSDS #:

Page 2 of 6 TN1094-0101

Product Code: 1384A / F42-1932,

SECTION 4 FIRST AID MEASURES

First Aid Measures:

Inhalation:

If symptoms are experienced, move victim to fresh air and obtain medical advice.

Ingestion:

Rinse mouth. Drink 1 or 2 glasses of water. If irritation or discomfort occurs, obtain medical advice immediately.

Eye:

Do not allow victim to rub eye(s). Flush with lukewarm, gently flowing water for 5 minutes or until particle is removed. If irritation persists, obtain medical attention.

Skin:

Wash with soap and water. If irritation persists, obtain medical advice.

Note to Physicians:

None

SECTION 5 FIRE FIGHTING MEASURES

Fire Fighting Measures:

Extinguishing Media:

CO2, water, dry chemicals

Unsuitable Extinguishing Media:

None

Special Fire Fighting Procedures:

None

Unusual Fire and Explosion Hazards:

Can form explosive dust-air mixtures when finely dispersed in air.

Fire and Explosive Properties (See also Section 9):

Hazardous Combustion Products:

CO2, CO

Other Properties:

Not available

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Avoid breathing dust.

Environmental Precautions:

Do not wash away into sewer.

Method for Cleaning Up:

Sweep slowly spilled powder on to paper, and carefully transfer into a waste container. Clean remainder with wet paper, wet cloth or a vacuum cleaner.

If a vacuum cleaner is used, it must rate as a dust explosion-proof type. Fine powder can form explosive dust-air mixtures.

SECTION 7 HANDLING AND STORAGE

Handling:

Avoid breathing dust.

Use with adequate ventilation.

Storage:

Keep out of the reach of children.

Keep away from oxidizing materials.

Specific Uses:

Toner for electrophotographic apparatus. For more information, please refer to the instruction of this product.

Date of Issue: July 10, 1996

Revised:

September 2, 2002

Page 3 of 6



MATERIAL SAFETY DATA SHEET Product Code: 1384A / F42-1932,

MSDS #: TN1094-0101

| | URE CONTR | OLS / PERSONAL PROTECTION | |
|--|----------------------------|--|--|
| Exposure Guidelines: USA OSHA PEL (TWA ACGIH TLV (TWA): DFG (MAK): (Also refer to SECTION | 10 mg/m³ (Ir 4 mg/m³ (I | fotal dust), 5 mg/m³ (Respirable fraction) shalable fraction), 3 mg/m³ (Respirable fraction) nhalable fraction), 1.5 mg/m³ (Respirable fraction) | |
| Engineering Controls: Use adequate ventilation | | | |
| Personal Protection Equip | ment(s): | | |
| Respiratory Protection: ☐ Required ☑ Not Requi | | ired | |
| Eye/Face Protection: | ☐ Required ☑ Not Required | | |
| Skin Protection: | ☐ Required ☑ Not Required | | |
| SECTION 9 PHYSIC | CAL AND CH | EMICAL PROPERTIES | |
| Appearance: | | Black fine powder | |
| Odor: | | Slight plastic odor | |
| рН: | | Not applicable | |
| Boiling Point/Range(°C): | | Not applicable | |
| Melting Point/Range(°C): | | 100 - 150 (Softening point) | |
| Decomposition Temperature(°C): | | >200 | |
| Flash Point(°C): | | Not applicable | |
| Flammable (Explosive) Limits: | | Not applicable | |
| Autoignition Temperature(°C): | | Not available | |
| Flammability: | | Not-flammable (Test method : Directive 92/69/EEC, A10 Flammability (Solids)) | |
| Explosive Properties: | | Can form explosive dust-air mixtures when finely dispersed in air. | |
| Oxidizing Properties: | | Not available | |
| Vapor Pressure: | | Not applicable | |
| Vapor Density: | | Not applicable | |
| Density / Specific Gravity: | | 1.4-1.6 | |
| Water Solubility: | | Negligible | |
| Fat Solubility: | | Partially soluble in toluene and xylene. | |
| Partition Coefficient (n-O | ctanol/Water): | Not applicable | |
| Percent Volatile: | | Negligible | |
| Evaporation Rate: | | Not applicable | |
| Viscosity (mPa s): | | Not applicable | |
| | | | |

Page 4 of 6

Canon

MATERIAL SAFETY DATA SHEET Product Code: 1384A / F42-1932,

MSDS #: TN1094-0101

| SECTION 10 STABILITY AND REACTIVITY | | | |
|---|--|--|--|
| Stability: | ☑ Stable ☐ Unstable | | |
| Conditions to Avoid: | None | | |
| Materials to Avoid: | Strong oxidizers | | |
| Hazardous Decomposition Products | : CO, CO2 | | |
| Hazardous Polymerization: | ☐ May Occur ☑ Will Not Occur | | |
| Conditions to Avoid: | None | | |
| SECTION 11 TOXICOLOGIC | AL INFORMATION | | |
| Acute Toxicity: Inhalation: Not available | | | |
| Ingestion: Estimate:Rat, LD50 > 5000mg/ | /kg | | |
| Eye: Estimate:Rabbit, transient sligh | nt conjunctival irritation only. | | |
| Skin: Estimate:Rabbit, non-irritant | | | |
| Sensitization: Estimate:Guinea pig, skin : No | n-sensitizing | | |
| Mutagenicity: Ames Test (S. typhimurium): | Negative | | |
| Reproductive Toxicity: Not available | | | |
| Carcinogenicity: Not available | | | |
| respirable-sized particles comp is most relevant to potential hu animals at 4 mg/m³, and a mild | ry response upon chronic inhalation exposure in rats to a toner enriched in pared to commercial toner. No pulmonary change was found at 1 mg/m³ which man exposure. A minimal to mild degree of fibrosis was noted in 22% of the 1 to moderate degree of fibrosis was observed in 92% of the animals at 16 buted to "lung overloading", a generic response to excessive amounts of any prolonged interval. | | |

Page 5 of 6

Canon

MATERIAL SAFETY DATA SHEET

MSDS #: TN1094-0101 Product Code: 1384A / F42-1932,

| SECTION 12 ECOI | LOGICAL INFORMATION |
|--|--|
| Mobility: | Not available |
| Persistence / Degradabil | ity: Not available |
| Bioaccumulation: | Not available |
| Ecotoxicity: | Not available |
| Other Adverse Effects: | Not available |
| SECTION 13 DISP | OSAL CONSIDERATION |
| container, unless dust- | toner container into fire; heated toner may cause severe burns. DO NOT shred a toner-explosion preventing measures are taken. Finely dispersed particles form explosive sal should be subject to federal, state or local laws. |
| SECTION 14 TRA | NSPORT INFORMATION |
| UN #: No | ne |
| UN Shipping Name: No | ne |
| UN Classification: No | ne |
| UN Packing Group: No | ne |
| The second secon | Yes Chemical name (wt%): No |
| Special Precautions: No | ne |
| SECTION 15 REC | GULATORY INFORMATION |
| < EU Information > | |
| Information on the La | |
| Symbol & Indication | m: Not required |
| R-Phrase: Not required | |
| S-Phrase: Not required | |
| Dangerous Compo | nent(s): |
| Special Precautions Not required | s under 1999/45/EC Annex V: |
| - | Relation to Protection of Man or the Environment: ot regulated |
| (EC)2037/2000: No | ot regulated |
| (EEC)2455/92: No | ot regulated |
| Others: N | one |
| < USA Information > | |
| Information on the L | abel: |
| Signal Word: N | ot required |
| Hazard warning: Not required | |

Page 6 of 6

Canon

MATERIAL SAFETY DATA SHEET Product Code: 1384A / F42-1932,

MSDS #: TN1094-0101

| Safety Advice: Not required | | |
|--|--------------------------|-----------|
| Hazardous Component(s): None | | |
| SARA Title III §313: | | |
| Chemical Name | | Weight % |
| None | | |
| California Proposition 65: | | |
| Chemical Name | | Weight % |
| None | | |
| Canada Information > | | |
| WHMIS Controlled Product: | Not a controlled product | |
| Australia Information > | | |
| Statement of Hazardous Nature: Not classified as hazardous according to criteria of NOHSC. | | of NOHSC. |
| | | |

SECTION 16 OTHER INFORMATION

Revised information from the previous version:

Entirely revised

Literature Reference:

- U.S. Department of Labor, 29CFR Part 1910
- U.S. Environmental Protection Agency, 40CFR Part 372
- U.S. Consumer Product Safety Commission, 16CFR Part 1500
- ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
- U.S. Department of Health and Human Services National Toxicology Program, Annual Report on Carcinogens
- World Health Organization International Agency for Research on Cancer, IARC Monographs on the Evaluation on the Carcinogenic Risk of Chemicals to Humans
- DFG, List of MAK and BAT Values
- EU Directive 76/769/EEC, 67/548/EEC, 1999/45/EC
- EU Regulation (EC)2037/2000, (EEC)2455/92
- Canada Workplace Hazardous Materials Information System
- Australia National Occupational Health and Safety Commission's Approved Criteria for Classifying Hazardous Substances[NOHSC:1008]

Abbreviations

- "EU" stands for European Union.
- "OSHA PEL" stands for PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration(USA).
- "ACGIH TLV" stands for TLV(Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.
- "EU ILV" stands for Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC and 2000/39/EC.
- "DFG MAK" stands for MAK(Maximale Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft.
- "TWA" stands for Time Weighted Average.
- "IARC" stands for International Agency for Research on Cancer.
- "NTP" stands for National Toxicology Program (USA).
- "OSHA HCS" stands for Occupational Safety and Health Act, Hazard Communication Standard(USA).
- "FHSA" stands for Federal Hazardous Substances Act(USA).
- "WHMIS" stands for Workplace Hazardous Materials Information System.
- "NOHSC" stands for National Occupational Health and Safety Commission Act 1985.

The information, data and recommendations set forth herein (the "Information") are presented in good faith and are believed to be correct as of the date hereof. The company/manufacturer makes no representations as to the completeness or accuracy of the Information and disclaims responsibility for any reliance thereon. The Information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. Any use of the Information must be determined by the user to be in accordance with applicable Federal, state and local laws and regulations. In no event will the company/manufacturer be responsible for damages of any nature whatsoever resulting from the use or reliance upon the Information.

NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE WITH RESPECT TO THE INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS.

Date of Issue:

July 10, 1996

Revised:

September 2, 2002