
MATERIAL SAFETY DATA SHEET

DATE PREPARED: 15th March 1999

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the Substance or Preparation

Product Name: Canon TD-5 Black Toner

Description: Canon Black Toner for GP215

1.2 Company Undertaking Identification

Manufacturer: Canon Inc.
Phone: 03-3758-2111

Distributor: Canon (UK) Limited
Woodhatch
Reigate
Surrey
Telephone: (01737) 220000

SECTION 2: COMPOSITION/INFORMATION OF INGREDIENTS

Principal Components	Wt%	CAS #	USA OSHA	ACGIH
Polyester resin	45-60	-	-	-
Iron oxide	40-55	1317-61-9	-	-

All MSDS sheets have been updated to appear in the current 16 paragraph format (previously nine), information requested for the new format which isn't available from the previous format will have No Data Available against it. (As advised by Sedgwick Risk Consultants. Memo dated 28/02/97).

SECTION 3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW:	Black fine powder with slight plastic odour.
POTENTIAL HEALTH EFFECTS AND SYMPTOMS:	
INGESTION:	Ingestion is not applicable route of entry for intended use.
INHALATION:	Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.
EYE CONTACT:	May cause eye irritation.
SKIN CONTACT:	Unlikely to cause skin irritation.
Chronic Effects:	Not known.
Medical Conditions Generally known to be Aggravated by Exposure:	Not identified.

SECTION 4. FIRST AID MEASURES

FIRST AID MEASURES:	
INHALATION:	Remove victim to fresh air. Get medical attention if symptoms persist.
INGESTION:	Dilute stomach contents with several glasses of water. Get medical attention if symptoms persist.
EYE CONTACT:	Flush with running water for at least 15 minutes. If irritation persists, get medical attention.
SKIN CONTACT:	Wash with soap and water. If irritation persists, get medical attention.
Note to Physicians:	None.

SECTION 5. FIRE FIGHTING MEASURES

FIRE FIGHTING MEASURES:	
EXTINGUISHING MEDIA:	CO ₂ , water, dry chemicals,
UNSUITABLE EXTINGUISHING MEDIA:	None.
SPECIAL FIRE FIGHTING PROCEDURE:	None.
UNUSUAL FIRE AND EXPLOSIVE HAZARDS:	Toner material, like most organic material in powder form is capable of creating a dust explosion.
FIRE AND EXPLOSIVE PROPERTIES:	
FLASH POINT(°C):	No data available.
FLAMMABLE (EXPLOSIVE) LIMITS:	No data available.
AUTO-IGNITION TEMPERATURE (°C):	No data available.

FLAMMABILITY:	Non-flammable solid (according to test methods of USA 16 CFR 1500.44 and Annex V of EU Directive 84/449/EEC).
AUTOFLAMMABILITY:	Not applicable.
EXPLOSIVE PROPERTIES:	See 'Unusual Fire and Explosion Hazards'.
OXIDISING PROPERTIES:	No data available.
HAZARDOUS COMBUSTION PRODUCTS:	CO ₂ , CO
OTHER PROPERTIES:	Not known.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Avoid breathing dust. Use with adequate ventilation.
ENVIRONMENTAL PRECAUTIONS:	Do not wash away into sewer.
METHOD FOR CLEANING UP:	Sweep material onto paper and carefully transfer to a sealable waste container. If a vacuum is used, the motor must be rated as dust tight. A conductive hose bonded to the machine should be used to reduce static build up.

SECTION 7. HANDLING AND STORAGE

HANDLING:	Avoid breathing dust. Use with adequate ventilation. Wash thoroughly after handling.
STORAGE:	Keep out of reach of children.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:	<p>USA OSHA (TWA/PEL):</p> <p>15 mg/m³ (Total Dust)</p> <p>5 mg/m³ (Respirable Fraction)</p> <p>ACGIH (TWA/TLV):</p> <p>10 mg/m³ (Inhalable particulate)</p> <p>3 mg/m³ (Respirable particulate)</p> <p>DFG (MAK):</p> <p>4 mg/m³ (Inhalable fraction)</p> <p>1.5 mg/m³ (Respirable fraction)</p> <p>Also see section 2.</p>
ENGINEERING CONTROLS:	Good general ventilation should be sufficient under intended use.
PERSONAL PROTECTION EQUIPMENT(S):	
RESPIRATORY PROTECTION:	Not required.
EYE/FACE PROTECTION:	Not required.
SKIN PROTECTION:	Not required.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Black fine powder.
ODOUR:	Slight plastic odour.
pH:	Not applicable.
BOILING POINT/RANGE (°C):	Not applicable.
MELTING POINT/RANGE (°C):	100-150°C (Softening point).
DECOMPOSITION TEMPERATURE (°C):	No data available.
FLASH POINT (°C):	No data available.
FLAMMABLE (EXPLOSIVE) LIMITS:	No data available.
AUTOIGNITION TEMPERATURE (°C):	No data available.
FLAMMABILITY:	Non-flammable solid (according to test methods of USA 16 CFR 1500.44 and Annex V of EU Directive 84/449/EEC).
AUTOFLAMMABILITY:	Not applicable..
EXPLOSIVE PROPERTIES:	See 'Unusual Fire and Explosion Hazards'..
OXIDISING PROPERTIES:	No data available.
VAPOUR PRESSURE:	Not applicable.
VAPOUR DENSITY (Air=1):	Not applicable.
DENSITY/SPECIFIC GRAVITY:	1.4 – 1.8
WATER SOLUBILITY:	Negligible.
FAT SOLUBILITY:	Partially soluble in toluene and xylene.
PARTITION COEFFICIENT (N-OCTANOL/WATER):	Not applicable.
PERCENT VOLATILE:	Not applicable.
EVAPORATION RATE:	Not applicable.

SECTION 10. STABILITY AND REACTIVITY

STABILITY:	Stable
CONDITIONS TO AVOID:	None.
MATERIALS TO AVOID:	Strong oxidising agents.
HAZARDOUS DECOMPOSITION PRODUCTS:	Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.
HAZARDOUS POLYMERISATION:	Will not occur.
CONDITIONS TO AVOID:	None

SECTION 11. TOXICOLOGICAL INFORMATION**ACUTE TOXICITY:**

INHALATION:	(Data from similar toner): LC50:>5mg/L/4hr (rats).
INGESTION:	Oral LD50:>5000mg/kg (rats).
SKIN CONTACT:	Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC based on test data of rabbits.
EYE CONTACT:	Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC based on test data of rabbits.
SENSITISATION:	No sensitiser according to Annex I of EU Directive 67/548/EEC and strong sensitiser list of FHSA.
MUTAGENICITY:	Negative. (Ames Test: Salmonella typhimurium.).
REPRODUCTIVE TOXICITY:	No reproductive toxic substances according to Annex I of EU Directive 67/548/EEC, California Proposition 65 and DFG.
CARCINOGENICITY:	No human carcinogen or potential carcinogen according to IARC Monographs, NTP, OSHA (USA) regulation, California Proposition 65 and Annex I of EU Directive 67/548/EEC.
OTHERS:	Sub-acute Toxicity – Rats; 90 days inhalation test. Test sample: Magentic toner (mean volume diameter is 6.0 μ m). NOEL (No observed effect level): 16 mg/m ³ .

SECTION 12. ECOLOGICAL INFORMATION

No information indicating any adverse ecological effects.

SECTION 13. DISPOSAL CONSIDERATIONS

METHOD OF DISPOSAL:	The waste toner could be considered as plastic powder waste. Disposal should be subject to federal, state or local laws.
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SECTION 14. TRANSPORT INFORMATION

UN#:	None
UN SHIPPING NAME:	None
UN CLASSIFICATION:	None
UN PACKING GROUP:	None
SPECIAL PRECAUTION:	None.

SECTION 15. REGULATORY INFORMATION**EU INFORMATION**

INFORMATION ON THE LABEL:	Not required.
SYMBOL AND INDICATION:	Not required.
RISK PHRASE:	Not required.
DANGEROUS INGREDIENTS:	None.

Specific provisions in relation to protection of man or the environment.

76/769/EEC:	Not regulated.
(EC)3093/94:	Not regulated.
(EEC) 2455/92:	Not regulated.
OTHERS:	None.

USA Information:**Information on the Label:**

Signal Word:	Not required.
Hazard warning:	Not required.
Safety Advice:	Not required.
Hazardous Component(s):	None.

SARA Title III §313:

Chemical Name	Weight %
None.	

California Proposition 65:

Chemical Name	Weight %
None	

SECTION 16. OTHER INFORMATION**Literature Reference:**

- U.S. Department of Labour, 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 Organisation 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, 88/379/EEC and their amendments.
- EU Regulation (EC) 3093/94, (EEC)2455/92 and their amendments.

Other Information:

None

ABBREVIATIONS:

"EU" stands for European Union.

'OSHA PEL' stands for PEL (Permissible Exposure Limit) under Occupational Safety and Health Administration.

"ACGIH TLV" stands for TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

"IARC" stands for International Agency for Research on Cancer.

"NTP" stands for National Toxicology Program (USA).

'EU ILV' stands for Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC.

"DFG MAK" stands for MAK (Maximale Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft

'TWA' stands for Time Weighted Average.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any other process. And it is based on the level of our knowledge as of the date of preparation.