# **TOSHIBA** MATERIAL SAFETY DATA SHEET

Date of Preparation Date of Revised : May 24, 2002

: October 29, 2002

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SECTION 1 CHEMICAL	PRODUCT AND COMPANY IDENTIFICATION
Product Name	: T-6510 Black Toner
Used for	: Toshiba Copiers, e-STUDIO 550, 650 and 810
Company Name	: Toshiba TEC Corporation
Address	: 1-1, Kanda nishikichou, Chiyoda-ku, Tokyo 101-8442, Japan
Telephone Number	: +81-3-3438-6854
Manufacturer Name	: (1) Toshiba America Business Solutions, Inc.
	Toner Products Division (Mitchell Plant)
	901 North Foster Street, Mitchell, SD. 57301-0070 U.S.A.

: (1) Toshiba America Information	Systems, Inc.
Emergency Telephone. No.	: +1-800-424-9300
	For calls within the U.S. only.
(2) Toshiba of Canada Limited	
Telephone. No.	: +1-905-405-3500 For calls within Canada only.
	Emergency Telephone. No. (2) Toshiba of Canada Limited

### SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS No.	<u>wt.%</u>
Styrene acrylate copolymer		90-95
Carbon black	1333-86-4	4-8
Inorganic pigment		<2
Organic pigment		<2
		Trade Secret

### SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview	<ul> <li>If used as intended, the product does not present acute or chronic health hazard.</li> </ul>
Physical Hazards	<ul> <li>This product is not classified as flammable or combustible. It will burn in case of fire.</li> </ul>
Routes of Exposure	Avoid contact with strong oxidizers such as chromate, bromate and nitrates. Inhalation, dermal contact, incidental ingestion

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Inhalation	: Excessive inhalation may cause irritation of the nose, throat and respiratory tract.
Eye Contact	: Non-irritant.
Dermal Contact	: Non-irritant, non-sensitiser.
Ingestion	: Not currently known.
Chronic Effects	: See Section 11 Supplemental Health Information.
Carcinogenicity	: See Section 11 Supplemental Health Information.
Reproductive/Developmental	: Not identified.
Target Organs	: Prolonged breathing of high concentrations may cause
	adverse effects on the respiratory system.
Signs and Symptoms of Expo	sure
	: Prolonged exposure to dusts of this product may irritate the respiratory system
Medical Conditions Aggravate	ed by Exposure to This Product
	: Respiratory disorders, such as asthma, may be aggravated
	by prolonged exposure to high concentrations of this product.

### SECTION 4 FIRST AID MEASURES

Eye Contact	: Immediately flush eyes with plenty of water for at least 15 minutes.
	If irritation persists, call a physician.
Skin Contact	: Wash with soap and water. Wash clothing before reuse.
	If irritation occurs or is persistent, seek medical attention.
Ingestion	: Dilute stomach contents with several glasses of water.
Inhalation	: Remove from exposure area to fresh air immediately.
	Contact a physician if there is any difficulty in breathing or other signs of distress.

#### SECTION 5 FIRE FIGHTING MEASURES

General Hazard	: Product will burn in case of fire.
Flash Point	: Not applicable
Flammable Limits	: Not applicable
Autoignition Temperature	: Not applicable
Flammability classification	: Not applicable
Extinguishing Media	: Foam, halon, carbon dioxide, dry chemical & water fog.
Unusual Fire & Explosion H	azard
	: Combustible powder. Dust of this product at sufficient concentrations can form explosive mixtures with air.
Fire Fighting Procedures	: None
Hazardous Combustion Pro	ducts
	: Carbon monoxide, carbon dioxide and smoke.

### SECTION 6 ACCIDENTAL RELEASE MEASURES

Spills or Leaks	: Vacuum-clean spilled toner and carefully transfer into sealable waste
	container. If no vacuum-cleaner is available, sweep slowly to minimize
	generation of dust during clean-up. Residue can be removed with soap
	and cold water.

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SECTION 7	IANDLING AND STORAGE	
Handling	: Avoid dust, keep away from ignition sources.	
Prevention of I	e and Explosion	
	: This material is capable of creating a dust explosion.	
	Keep away from heat, sparks & flame.	
Storage	: Keep container in cool and dry area.	
Hygienic Pract	<ul> <li>Avoid inhalation and ingestion. Avoid getting in eyes, on skin or clothing.</li> <li>Wash hands thoroughly after handling, and before eating, drinking, or smoking.</li> </ul>	
SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION Exposure Limits		

Exposure Limits	
OSHA PELs (TWA)	
as the product	: 15mg/m <sup>3</sup> (Total dust)
	5mg/m <sup>3</sup> (Respirable fraction)
Carbon black	: 3.5 mg/m <sup>3</sup>
Other substances	: Not listed
ACGIH TLVs (TWA)	
as the product	: 10mg/m <sup>3</sup> (Total dust)
	3mg/m <sup>3</sup> (Respirable fraction)
Carbon black	: 3.5 mg/m <sup>3</sup>
Other substances	: Not listed
DFG-MAK (TWA)	
as the product	: 4mg/m <sup>3</sup> (Inhalable fraction)
	1.5mg/m <sup>3</sup> (Respirable fraction)
All substances	: Not listed
NOHSC (TWA)	
All substances	: Not listed
Engineering Controls	: Maintain adequate ventilation.
Eye Protection	: Not required under intended use.
Skin Protection	: Not required under intended use.
Respiratory Protection	: Not required under intended use.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Fine solid powder
Color	: Black
Scent	: Odorless
Melting Point	: 110 - 150 degree (Softening point)
Specific Gravity(H2O=1)	: 1.1 - 1.5
Vapor Pressure	: Not applicable
Vapor Density (Air=1) :	: Not applicable
Evaporation Rate	: Not applicable
Solubility in Water	: Negligible
pH Value	: Not a water-based product, therefore not applicable.

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#### SECTION 10 STABILITY AND REACTIVITY

Stability	: Stable	
Incompatibility	: Not identified.	
Hazardous Decomposition Products		
	: Carbon monoxide and carbon dioxide.	
Hazardous Polymerization:	: Will not occur.	

#### SECTION 11 SUPPLEMENTAL HEALTH INFORMATION

Acute oral toxicity	: LD50 is greater than	 2,500mg/kg.			
	(This was the highest attainal	(This was the highest attainable mass.)			
Acute inhalation	: LC50(4H) is in excess of	5.98mg/l.			
	(This was the highest attainat	ble concentration.)			
Eye irritation	: Non-irritant.				
Skin irritation	: Non-irritant.	: Non-irritant.			
Skin sensitization	: Non-sensitiser.				
Mutagenicity	: Negative in the Ames test.				
Carcinogenicity :		In 1996, the IARC classified carbon black as a Group 2B carcinogen (possible human carcinogen).			
Chronic Effects :		: In a study in rats by chronic inhalation exposure to a typical toner, a mile to moderate degree of lung fibrosis was observed in 92 % of the rats in			
	<b>e</b>	ng/m <sup>3</sup> )exposure group, and a minimal to mild d in 22% of the animals in the middle (4			
		ese findings are attributed to "lung onse to excessive amounts of any dust olonged period.			

### SECTION 12 ECOLOGICAL INFORMATION

This material has not been tested concerning environmental effects (fish toxicity, bird toxicity, invertebrate toxicity, phyto-toxicity and environmental fate).

### SECTION 13 DISPOSAL CONSIDERATION

Dispose of in accordance with local, state and federal regulation. Empty plastic container may be recycled.

#### SECTION 14 TRANSPORTATION INFORMATION

Special Precautions	:	None		
International Transport Information				
UN Classification Number	:	Not applicable		
DOT Identification Number	:	Not applicable		
Domestic Transportation	:	Not applicable		
Other Information	:	Not applicable		

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SECTION 15 REGULA	TORY INFO	RMATION	
IARC	: See secti	ion 11.	
US/Canada Information			
OSHA Hazard Communic	cation Standar	d, 29CFR 1910. 1200	
	: Not regul	ated.	
Toxic Substance Control	Act (TSCA)		
	: All chemi	ical substances in this	product comply with
	all applic	able rules or orders un	der TSCA.
RCRA (40 CFR 261)	: Product of	or components not liste	ed.
CERCLA/SARA Informat	io : Not regul	lated.	
NTP Annual Report on C	Carcinogens		
	: Not listed	as an NTP carcinoge	n.
California Proposition 65	: Neither to	oner, or any of the corr	ponents, are listed as chemicals known
-	to the Sta	ate of California to cau	se cancer or reproductive system effects.
Controlled Products Reg	ulations(Canad	da)	
C C			d in accordance with the hazard criteria
	of the CF	PR.	
Workplace Hazardous N	laterials Inform	nation System(Canada	)
-	: No toxico	ology information availa	able
Other State Regulations	: Carbon b	black is listed in the Net	w Jersey Right to Know List,
-	Pennsylv	vania Hazardous Subs	tance List, and Massachusetts Substance Li
U.S./Canada Label State	ements		
	: LOW HA	ZARD FOR RECOMM	ENDED HANDLING. Minimize dust
	generatio	on and accumulation.	Jse with adequate ventilation.
EU Information			
Label Information Accord	ing to Directive	es 67/548 EEC & 88/3	79 EEC
Symbol & Indication	: Not requi	ired	
Risk Phrase	: Not requi	ired	
Safety Advise Phrase	: Not requi	ired	
EEC Directive(76/548 EE	C, 79/831 EE	C, 92/32 EEC)	
		ical substances in this e rules or order under	product comply with all EEC Directive.
The Subject of Specific P			Man or the Environment.Directive 76/769/El
	: Not requi		
National requirement :	•	fic regulations or restrie	ctions

# SECTION 16 OTHER INFORMATION

National Fire Protection Association (NFPA) Classification :					
:	1				
:	0				
:	0				
(	0 = insignificant, 1 = slight)				
Hazardous Materials Information Systems (HMIS) :					
:	1				
:	0				
:	0				
(	0 = insignificant, 1 = slight)				
	: ; ormatio ; ;				

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Notice	: Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparat such information, Toshiba Corporation extends no warranties, make representations, and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.	
References	<ul> <li>IARC (1996) IARC Monographs on the Evaluation of the Carcinogenic Risks of Chemicals to Humans, Vol. 65, Printing Processes and Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp. 149-261.</li> <li>H. Muhle, B. Bellmann, O. Creutzenberg, C. Dasenbrock,</li> <li>H. Ernst, R. Kilpper, J. C. MacKenzie, P. Morrow, U. Mohr,</li> <li>S. Takenaka, and R. Mermelstein (1991).</li> <li>Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats, Fundamental and Applied Toxicology 17, pp. 280-299.</li> </ul>	
Abbreviation	<ul> <li>(1) OSHA PEL stands for Permissible Exposure Limit under Occupational Safety and Health Administration (USA).</li> <li>(2) ACGIH TLV stands for Threshold Limit Value under American Conference of Governmental Industrial Hygienists (USA).</li> <li>(3) DFG-MAK stands for Maximale Arbeitsplatzkonzentrationen under Deutsche Forschungsgemeinschaft.</li> <li>(4) TWA stands for Time Weighted Average.</li> <li>(5) IARC stands for International Agency for Research on Cancer.</li> <li>(6) NTP stands for National Toxicology Program (USA).</li> <li>(7) NIOSH stands for National Institute for Occupational Safety and Health (USA).</li> <li>(8) DOT stands for Department of Transportation (USA).</li> <li>(9) NOHSC stands for National Occupational Heath and Safety Corr (Australia).</li> </ul>	
Prepared by	: Toshiba TEC Corporation Quality Assurance Department 6-78 Minami-cho, Mishima-shi, Shizuoka-ken, 411-8520 Japan	