

FDNo.D-1710

Material Safety Data Sheet  
 May be used to comply with  
 OSHA's Hazard Communication Standard,  
 29CFR 1910.1200. Standard must be  
 consulted for specific requirements.

HAZARD RATING	
1=Extreme	
2=High	
3=Moderate	
4=Low	
5=Very Low	
6=Hazardous	
7=Chemical Health Hazard - See Section 11	

IDENTITY ( As Used on Label and List )

D-2510, D-1710, D-1350 and D-4550 Black Developer

## Section I

Manufacturer's Name Toshiba Corporation Yanagicho Works	Emergency Telephone Number
Address (Number, City, State, and ZIP Code) 70, Yanagi-cho, Saiwai-ku, Kawasaki-shi, 210 Japan	Telephone Number for Information 044-546-5600
	Date Prepared May 20, 1994
	Signature of Preparer (Optional) Yasuhiro Hatakeyama

## Section II - Ingredients / Identity Information

Components (Specific Chemical Identity, Common Name(s))	CAS No.	OSHA PEL	ACGIH TLV	%
Styrene acrylate copolymer	25036-16-2	Not listed	Not listed	8.5
Carbon black	1333-86-4	3.5mg/m <sup>3</sup>	3.5mg/m <sup>3</sup>	0.3
Iron oxide	1317-60-8	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	94.0
Zinc oxide	1314-13-2	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	
Copper oxide	1317-86-0	Not listed	Not listed	

\* PEL as the product : 15mg/m<sup>3</sup> (total dust), 5mg/m<sup>3</sup> (respirable dust)

\* TLV as the product : 10mg/m<sup>3</sup> (total dust), 5mg/m<sup>3</sup> (respirable dust)

## Section - III - Physical/Chemical Characteristics

Rolling Point	*N.A	Specific Gravity (H <sub>2</sub> O=1)	5.6-6.8
Vapor pressure ( mmHg. )	N.A	Melting Point	150°C
Vapor Density ( AIR=1 )	N.A	Evaporation Rate (Butyl Acetate=1)	N.A
Solubility in Water	Negligible		
Appearance and Odor	Fine black powder, practically odorless.		

## Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	N.A	Flammable Limits	LEL N.A	UEL N.A
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Extinguishing Media  
 CO<sub>2</sub> dry chemical, foam, or water.

Special Fire Fighting Procedures  
 This material will burn in the case of fire.  
 The decomposition products are CO, CO<sub>2</sub> and NOx.

Unusual Fire and Fighting Procedures  
 This material has no unusual fire or explosion hazards.

(Reproduces locally) \* N.A=Not applicable

OSHA 174, Sept, 1985

IDENTITY

Section V - Reactivity Data

D-1710

Stability	Unstable	X	Condition to Avoid	None
	Stable			None
Incompatibility (Materials to Avoid)				
Hazardous Decomposition or Byproducts				
None				
Hazardous Polymerization	May Occur	X	CO, CO <sub>2</sub> , and NOx	Condition to Avoid
	Will not Occur			

Section VI - Health Hazard Data

Route(S) of Entry: Inhalation ?

Yes      skin ?      Ingestion ?

Health Hazards (Acute and Chronic)      No      Possible but very unusual.

LDLo value of this toner in an oral acute toxicity test is over 5.0g/kg.

Carcinogenicity: NTP?      IARC Monographs?      OSHA Regulated?

No      No      No

Signs and Symptoms of Exposure

AMES test result is negative.

Minimum irritation to respiratory tract may occur as with exposure to any non-toxic dust.

Medical Conditions

Generally Aggravated by Exposure

Accumulation of dust in the respiratory system.

Emergency and First Aid Procedures

Inhalation: Remove to fresh air if effects occur, consult local medical personnel.

Eyes: In case of contact, immediately flush eyes with water for 5 minutes.

Ingestion: Rinse mouth with water. Call a physician.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Sweep up or clean up with a vacuum cleaner.

Waste Disposal Method

Waste material may be dumped or incinerated under conditions which meet all federal, state and local environmental regulations.

Precautions to Be Taken in Handling and Storing

No special storage requirements for safety reasons.

Other Precautions

None

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Ventilation	Local Exhaust	No	None required under normal use.	
	Mechanical (General)		Special	No
Protective Gloves	None required under normal use.	No	Other	No
			Eye Protection	None required under normal use.
Other protective Clothing or Equipment				
None required under normal use.				
Work/Hygiene Practices				
Inhalation should be avoided.				