

**MURATEC MODEL F-160/ F-120 / F-100 /F-98 / F-95 TONER CARTRIDGE (Page 1 of 2)**

**Material Safety Data Sheet**

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

**U.S. Department of Labor**

Occupational Safety and Health Administration  
 (Non-Mandatory Form)  
 Form Approved  
 OMB No. 1218-0072

IDENTITY (As Used on Label and List) TONER CARTRIDGE	Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.
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Section I

Manufacturer's Name <b>MINOLTA CO. LTD</b>	Emergency Telephone Number
Address (Number, Street, City, State, and ZIP Code)	Telephone Number for Information +81-6-271-2251
3-13, 2-Chome, Azuchi-Machi, Chuo-Ku, Osaka 541 Japan	Date Prepared 28 May 1996
	Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL ACGIH TLV	Other limits Recommended	% (optional)
<u>Hazardous Ingredients:</u>			
Carbon Black	3.5mg/m3	3.5mg/m3	1-5%

Section III - Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H <sub>2</sub> O - 1)	
Vapor Pressure (mm Hg)	N/A	Melting Point	No data available
Vapor Density (AIR - 1)	1.2	Evaporation Rate	

Appearance and Odor      Physical State: Solid Form: Powder      Color: Black

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	Not applicable	Flammable Limits	No data available	LEL	UEL
Extinguishing Media	CO <sub>2</sub> ; WATER; FOAM; DRY CHEMICAL		AVOID FULL WATER JET		
Special Fire Fighting Procedures	None				

For protection of firefighters, use self-contained breathing apparatus (SCBA)

Unusual Fire and Explosion Hazards      If dispersed in air, like most finely divided organic powders, may form an explosive mixture

**MURATEC MODEL F-160/ F-120 / F-100 / F-98 / F-95 TONER CARTRIDGE (Page 2 of 2)**

Section V - Reactivity Data			
Stability	Unstable		Conditions to Avoid
	Stable	X	Electronic discharge; throwing into fire
Incompatibility (Materials to Avoid)      Oxidizing materials			
Hazardous Decomposition or Byproducts CO, CO2			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur		
Section VI - Health Hazard Data			
Routes of Entry:    Inhalation? LC50    Eye?    No (rabbits)    Ingestion? LD50 (g/kg): >5.0 (rats)			
Health Hazards (Acute and Chronic) Chronic toxicity: Prolonged inhalation of excessive dust may cause lung damage.			
Hygiene measures: Wash hands after handling			
Carcinogenicity:                    NTP?    Not listed    IARC Monographs?                    Not listed                    OSHA Regulated    Not listed			
In 1996 the IARC reevaluated carbon black as a group 2B carcinogen (based on animal evidence)			
Signs and Symptoms of Exposure:			
Medical Conditions Generally Aggravated by Exposure                    No symptoms expected with intended use			
Emergency and First Aid Procedures    Inhalation: Move victim to fresh air; obtain medical advice                    Eyes: Do not allow victim to rub eyes. Flush with gently flowing water. Skin: Flush with gently flowing water and soap for 15 minutes. Ingestion: If discomfort occurs, seek medical attention			
Section VII - Precautions for Safe Handling and Use			
Steps to be Taken in Case Material is Released or Spilled                    Personal precautions: None                    Environmental: None Wipe off with paper or cloth; do not vacuum; it may create a dust explosion			
Waste Disposal Method                    Waste may be disposed or incinerated under conditions which meet all			
<u>federal, state, and local environmental regulations</u>			
Precautions to be Taken in Handling and Storing                    Handling: Try not to disperse particles			
Storage: <u>Keep in a cool, dry place</u>			
Other Precautions			
Section VIII - Control Measures			
Respiratory Protection (Specify Type)                    None required when used as intended			
Ventilation	Local Exhaust	None required	Special    None required
	Mechanical (General)	None req.	Other    None required
Protective Gloves    None required		Eye Protection                    None required when used as intended	
Other Protective Clothing or Equipment    None required when used as intended			

Work/Hygenic Practices

Wash hands after handling

**MURATEC MODEL F-160/ F-120 / F-100 / F-98 / F-95 DRUM CARTRIDGE (Page 1 of 2)**

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IDENTITY (As Used on Label and List) DRUM CARTRIDGE	Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.
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Section I

Manufacturer's Name <b>MINOLTA CO. LTD</b>	Emergency Telephone Number
Address (Number, Street, City, State, and ZIP Code) 3-13, 2-Chome, Azuchi-Machi, Chuo-Ku, Osaka Japan	Telephone Number for Information +81-6-271-2251
	Date Prepared 31 March 1993
	Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL ACGIH TLV	Other limits	
		Recommended	% (optional)
Hazardous Ingredients: NONE PRESENT	N/A	N/A	

Major Ingredients:

Substrate		
Aluminum Drum	+++	>99%
Coating Layer		<1%
Binder resin	+++	
Photosensitive material	+++	
Pigment	+++	

+++ - Supplies confidential information

Section III - Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H <sub>2</sub> O - 1)	
Vapor Pressure (mm Hg)	N/A	Melting Point	N/A
Vapor Density (AIR - 1)	2.7	Evaporation Rate	
Solubility in Water	INSOLUBLE		
Appearance and Odor	ODORLESS / PHYSICAL STATE: SOLID/ FORM: CYLINDER/ COLOR: GREEN		

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	N/A	Flammable Limits	N/A	LEL	UEL
Extinguishing Media	CO <sub>2</sub> ; WATER; FOAM; DRY CHEMICAL				
Special Fire Fighting Procedures	NONE				
Unusual Fire and Explosion Hazards	THIS MATERIAL HAS NO UNUSUAL FIRE/EXPLOSIVE HAZARDS				

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Section V - Reactivity Data			
Stability	Unstable		Conditions to Avoid
	Stable	X	NONE
Incompatibility (Materials to Avoid) NONE			
Hazardous Decomposition or Byproducts CO, CO2			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur		
Section VI - Health Hazard Data			
Routes of Entry: NONE Inhalation? Skin? Ingestion? <b>NO TREATMENT REQUIRED FOR ANY OF THE ABOVE</b>			
Health Hazards (Acute and Chronic) No symptoms expected with intended use			
Hygiene measures: Wash hands after handling			
Carcinogenicity: NTP? Not Listed IARC Monographs? Not Listed OSHA Regulated Not Listed			
Signs and Symptoms of Exposure: <b>NO SYMPTOMS EXPECTED WITH INTENDED USE</b>			
Medical Conditions Generally Aggravated by Exposure			
Emergency and First Aid Procedures			
Section VII - Precautions for Safe Handling and Use			
Steps to be Taken in Case Material is Released or Spilled			
Waste Disposal Method Waste may be disposed or incinerated under conditions which meet all <u>federal, state, and local environmental regulations</u>			
Precautions to be Taken in Handling and Storing Handling: This product will be scorched in case of fire			
Storage: <u>Keep in a cool, dry place</u>			
Other Precautions			
Section VIII - Control Measures			
Respiratory Protection (Specify Type) None required when used as intended			
Ventilation	Local Exhaust	None required	Special None required
	Mechanical (General)	None req.	Other None required
Protective Gloves	None required	Eye Protection	None required when used as intended

Other Protective Clothing or Equipment	None required when used as intended
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Work/Hygenic Practices	Wash hands after handling
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