

Date Revised :Jul. 22. 2013 Date Issued : Mar.30, 2010 MSDS No. F-01791

1.PRODUCT AND COMPANY IDENTIFICATION

Product Name: MX-312NT/MX-312GT/MX-312AT/MX-312BT/MX-312FT/MX-312CT (Black Toner)

Supplier Identification : Sharp Corporation

22-22 Nagaike-cho, Abeno-ku, Osaka, Japan

Local suppliers are listed below. Please contact the nearest supplier for additional information.

Area	(Country)	(Local suppliers)				
	U.S.A.	Sharp Electronics Corporation				
		Sharp Plaza, Mahwah, New Jersey 07495-1163				
		Telephone number : 800-237-4277				
North		Emergency telephone number : 800-255-3924				
America	Canada	Sharp Electronics of Canada Ltd.				
		335 Britannia Road East, Mississauga, Ontario L4Z 1W9				
		Telephone number : 905-890-2100				
		Emergency telephone number : 1-800-255-3924				
	Australia	Sharp Corporation of Australia PTY. Ltd.				
Oceania		No1 Huntingwood Drive Huntingwood Blacktown N.S.W.				
		Telephone number : 1300-13-50-22				
	Germany	Sharp Electronics (Europe) GMBH				
		Sonninstrasse 3, 20097 Hamburg				
		Telephone number : 040-2376-2185				
	United	Sharp Electronics (U. K.) Ltd.				
	Kingdom	4 Furzeground Way, Stockley Park, Uxbridge Middlesex,				
		UB11 1EZ				
	_	Telephone number : 08705-274-277				
	France	Sharp Electronics France S.A.				
		22, Avenue des Nations, Paris Nord 2, BP 52094 / 95948				
		Roissy-Charles de Gaulle, Cedex				
	• • •	Telephone number : 01-49-90-34-00				
	Austria	Sharp Electronics (Europe) GmbH Handelskai 342 1020 Wien				
		Telephone number : 01-727-19-0				
	Italy	Sharp Electronics (Italy) S.P.A.				
Europe	пату	Via Lampedusa, 13 20141 Milano				
		Telephone number : 02895951				
	Spain	Sharp Electronics (Espana) S.A.				
	Opani	Calle Sena, 2-10 Poligono Industrial Can Sant Joan. Parcela 8,				
		08174 Sant Cugat Del Valles				
		Telephone number : 93-581-97-00				
	Netherlands	Sharp Electronics Benelux B.V.				
		P.B. 900 Meidoornkade 10, 3992 AE Houten				
		Telephone number : 30-6359500				
	Sweden	Sharp Electronics Nordic AB				
		Box 14098, Gustavslundsvagen 12, SE-167 14, Bromma				
		Telephone number : 08-634-36-00				
	Switzerland	Sharp Electronics(Schweiz)AG				
		Moosstrasse 2, Postfach 321 8803 Ruschlikon				
		Telephone number : 01-846-6111				
Middle	U.A.E.	Sharp Middle East FZE				
East		P.O.Box 17115 Jebel Ali, Dubai				
Lusi		Telephone number : 04-8815311				



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2.COMPOSITION / INFORMATION ON INGREDIENTS

Substance[]	Preparation[X]					
Ingredient	CAS No.	Proportion	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>MAK-TWA</u>	<u>NOHSC-TWA</u>
Styrene-Acrylate copolymer	Confidential	80-90%	Not listed	Not listed	Not listed	Not listed
Carbon black	1333-86-4	5-10%	3.5mg/m ³	3.5mg/m ³	Not listed	3mg/m ³
Polyethylene	Confidential	1-5%	Not listed	Not listed	Not listed	Not listed
Polypropylene	Confidential	1-5%	Not listed	Not listed	Not listed	Not listed
Charge control agent	Confidential	1-5%	Not listed	Not listed	Not listed	Not listed
Amorphous silica	7631-86-9	0.1-1%	80 mg/m ³	2mg/m ³	Not listed	Not listed
Iron Oxide	1309-38-2	1-5%	Not listed	Not listed	Not listed	Not listed

3.HAZARDS IDENTIFICATION

Most Important Hazards and Effects of the Products

Human Health Effects	: There are no anticipated carcinogenic effects from exposure based on animal tests
	performed using toner. When used as intended according to instructions, studies do not
	indicate any symptoms of fibrosis will occur.
Environmental Effects	: Not toxic to aquatic organisms
Specific Hazards	: Dust explosion (like most finely divided organic powders)
Directive 1999/45/EC(Eu	rope) : Not classified as dangerous.
Australian Information	: Not classified as hazardous according to criteria of NOHSC.

4.FIRST-AID MEASURES

Route(s) of Entry : Inhalation?		<u>Skin?</u>	Ingestion?
	Yes	No	Possible but very unusual.
Inhalation	: Remove to fresh air. If s	symptoms occur,	consult medical personnel.
Skin Contact: Wash with soap and water for 15 minutes or until particle is removed. If irritation does occur, consult medical personnel.			
Eye Contact: Flush eyes immediately with water for 15 minutes. If irritation does occur, consult medical personnelIngestion: Rinse with water and drink several glasses of water. If irritation or discomfort does occur, consult medical personnel.			
.FIRE-FIGHTI	NG MEASURES		

Extinguishing Media	: Water, CO ₂ , foam and dry chemicals
Special Fire Fighting Procedures	: None
Fire and Explosion Hazards	: Toner material, like most finely divided organic powders, may form an explosive mixture.

6.ACCIDENTAL RELEASE MEASURES		
Personal Precautions	: None	
Environmental Precautions	: None	
Methods for Cleaning Up	: Wipe off with paper or cloth. Do not use vacuum cleaner when a large amount is released. It, like most finely divided organic powders, is capable of creating a dust explosion.	



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7.HANDLING AND STORAGE

Handling	
Technical Measures	: None
Precautions	: None
Safe Handling Advice	: Use of a dust mask is recommended when handling a large quantity of toner or during long term exposure, as with any non-toxic dust. Try not to disperse the particles.
Storage	
Technical Measures	: None
Storage Conditions	: Keep container closed and Store in a cool and dry place. Keep out of the reach of children.
Incompatible Products	•

8.EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures	
Ventilation	: Not required under intended use.
Exposure Limit Values	
OSHA-PEL(USA)	: 15mg/m ³ (Total Dust), 5mg/m ³ (Respirable Dust)
ACGIH-TLV(USA)	: 10mg/m ³ (Total Dust), 3mg/m ³ (Respirable Dust)
Personal Protective Equipment	
Respiratory Protection	: Not required under intended use.
Hand Protection	: Not required under intended use.
Eye Protection	: Not required under intended use.
Skin Protection	: Not required under intended use.
Other Protective Equipment	: Use of a dust mask and goggles are recommended when handling a large quantity of toner or during long term exposure, as with any non-toxic dust.

PHYSICAL AND CHEMICAL PROPERTIES			
Appearance			
Physical State : Solid	Form : Powder	Color : Black	Odor : odorless
Ph	: Not applicable		
Boiling / Melting Point	: Not applicable		
Softening Point(°C)	: 100 - 130		
Flash Point(°C)	: Not applicable		
Ignition Point(°C)	: > 350		
Explosion Properties	: No data		
Density(g/cm³)	: 1.1 (bulk density : a	approx. 0.35)	
Solubility in Water	: Negligible		

10.STABILITY AND REACTIVITY

Stability	: Stable
Hazardous Reactions	: Dust explosion, like most finely divided organic powders.
Conditions to Avoid	: Electric discharge, throwing into fire.
Materials to Avoid	: Oxidizing Materials
Hazardous Decomposition Products	: CO, CO ₂ and NO _X
Further Information	: None Dermal



Page : 4/5

Date Revised :Jul. 22. 2013 Date Issued : Mar.30, 2010 MSDS No. F-01791

11.TOXICOLOGICAL INFORMATION

Acute Toxicity	
Ingestion(oral)	: LD ₅₀ > 2000mg/kg (Rats)
Inhalation	: LC ₅₀ > 5.0mg/L (Rats)
Eye irritation	: Not an irritant (Rabbits)
Skin irritation	: Not an irritant (Rabbits)
Skin sensitizer	: No sensitization
Mutagenicity	: Negative (Ames Test)
Carcinogenicity	: In 1996 the IARC reevaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This classification is given to chemicals for which there is inadequate human evidence, but sufficient animal evidence on which to base an opinion of carcinogenicity. The classification is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung. Studies performed in animal models other than rats did not show any association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation, where carbon black is bound in a resin matrix, demonstrated no association between toner exposure and tumor development in rats.
Chronic Effect	: In a study in rats of chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16mg/m ³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4mg/m ³) exposure group, but no pulmonary change was reported in the lowest (1mg/m ³) exposure group, the most relevant level to potential human exposures.

12.ECOLOGICAL INFORMATION

Ecotoxicity

On available data, toner is not harmful to aquatic organisms

13.DISPOSAL CONSIDERATIONS Waste from Residues : Waste material may be dumped or incinerated under conditions which meet all federal, state and local environmental regulations. Contaminated Packaging : Waste may be disposed or incinerated under conditions which meet all federal, state and local environmental regulations.

14.TRANSPORT INFORMATION

UN Classification : None Not classified as hazardous for transport.



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15.REGULATORY INFORMATION

US Information				
TSCA(Toxic Substances Control Act) :				
All chemical substances in this product comply with all applicable rules or order under TSCA.				
SARA(Superfund Amendments and Reauthorization Act) Title III				
302 Extreme Hazardous Substance : None				
311/312 Hazard Classification	: None			
EU Information				
1999/45/EC and 67/548/EEC				
Symbol & Indication	: Not required			
R-Phrase	: Not required			
76/769/EEC	: All chemical substances in this product comply with all applicable rules or order under 76/769/EEC.			

16.OTHER INFORMATION				
NFPA Rating (USA)	: Health=1	Flammability=1	Reactivity=0	
WHMIS Legislation (Canada)	: This product is not a controlled product.			
References				
IARC(1996) : IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol. 65,				
Printing Process And Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp.149-261				

H.Muhle, B.Bellmann, O.Creutzenberg, C.Dasenbrock, H.Ernst, R.Kilpper, J.C.MacKenzie, P.Morrow, U.Mohr, S.Takenaka, and R.Mermelstein(1991) Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats. Fundamental and Applied Toxicology 17, pp.280-299.

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. However, all materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we do not guarantee that these are the only hazards which exist.