8-31-05

S H A R P

Date Revised : Nov. 28, 2001
Date Issued : May 1, 1993

MATERIAL SAFETY DATA SHEET (1/2)

MSDS No. F-0401

Section 1. Product Identification

Product :
SD-360NT / SD-360T / SD-360ST (Black Toner)

Section 2. Supplier's Name and Address

Sharp Corporation
22-22 Nagaike-cho, Abeno-ku, Osaka, Japan
Local suppliers are listed below. Please contact the nearest supplier for additional information.

(Country)	(Name and Telephone Number)
U.S.A.	Sharp Electronics Corporation Telephone number for information: 1-800-237-4277 Emergency telephone number : 1-800-255-3924
Canada	Sharp Electronics of Canada Ltd. Telephone number for information: 905-890-2100 Emergency telephone number : 1-800-255-3924
United Kingdom	Sharp Electronics (U.K.) Ltd. Telephone number for information: 01923-474013

Section 3. Ingredients

Ingredients	CAS No.	Proportion	OSHA PEL	ACGIH TLV	Other Limits
Styrene Acrylate copolymer	25767-47-9	>90%	Not listed	Not listed	None
Carbon black	1333-86-4	<6%	3.5mg/m^3	3.5mg/m^3	None
Organic ammonium salt	102561-46-6	<2%	Not listed	Not listed	None
Polypropylene	9003-07-0	<2%	Not listed	Not listed	None

Section 4. Hazardous Identification (Emergency Overview)

Toner is a fine, black powder possessing no immediate hazard. 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.

Section 5. Health Hazard Data

Route(s) of Entry : **Inhalation?** **Skin?** **Ingestion?**
Yes No Possible but very unusual.

Health Hazards : Acute oral toxicity --- LDL_0 of this toner is over 2,000mg/kg.
Mutagenicity --- The result of Ames test is negative.

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 containing carbon black 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.

Signs and Symptoms of Exposure : Minimal irritation to respiratory tract may occur as with exposure to any non-toxic dust.

Medical Conditions Generally Aggravated by Exposure : None

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MATERIAL SAFETY DATA SHEET (2/2)

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Section 5. Health Hazard Data (Continued)

Emergency and First Aid Procedures :

Inhalation ; Remove to fresh air. If effects occur, consult medical personnel.
Eye ; In case of contact, immediately flush eyes with water for 15 minutes.

Section 6. Physical Chemical Characteristics

Boiling/Melting Point	: Not applicable	**Specific Gravity**	: 1.1
Vapor Pressure	: Not applicable	**Solubility in Water**	: Negligible
Vapor Density	: Not applicable	**PH**	: Not applicable
Evaporation Rate	: Not applicable	**Viscosity**	: Not applicable
Appearance	: Fine powder	**Color**	: Black
Odor	: Odorless		

Section 7. Fire and Explosion Data

Flash Point (Method Used)	:	Not applicable
Ignition Temperature	:	>350^{0}C
Flammable Limits	:	(LEL); Not applicable (UEL); Not applicable
Extinguishing Media	:	CO_2, dry chemical, foam or water
Special Fire Fighting Procedure	:	None
Unusual Fire and Explosion Hazard	:	This material has no unusual fire or explosion hazards.
Sensitivity to Mechanical Impact	:	None
Sensitivity to Static Charge	:	None

Section 8. Reactivity Data

Stability	:	Stable
Incompatibility (Material to Avoid)	:	None
Hazardous Decomposition	:	CO, and NOx
Hazardous Polymerization	:	Will not occur.

Section 9. Precautions for Safe Handling and Use

Personal Protection Information (Respiratory, Eye Protection and Protective Glove):

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.

Engineering Control / Ventilation	:	Not required.
Work / Hygienic Practice	:	Inhalation should be minimized as with any non-toxic dust.
Steps to be taken in case of Spill or Leak	:	Sweep up or clean up with vacuum cleaner.
Waste Disposal Method	:	Waste material may be dumped or incinerated under conditions which meet all federal, state and local environmental regulations.

Section 10. Regulatory Information

NFPA Rating (U.S.A.)	:	Health = 1 Flammability = 1 Reactivity = 0
WHMIS Legislation (Canada)	:	This product is not a controlled product.
Transport Information	:	This product is not a hazardous material.
UN No.	:	None allocated.

Section 11. Other Information

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