

S H A R P

Date Revised: January 31, 2000

Date Issued : August 1, 1996

MATERIAL SAFETY DATA SHEET (1/2)

MSDS No. B-1008

Section 1. Product Identification

Product :

EO-45ND (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

Sharp Electronics (U.K.) Ltd.

Kingdom

Telephone number for information: 01923-474013

Section 3. Ingredients

<u>Ingredients</u>	<u>CAS No.</u>	<u>Proportion</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Other Limits</u>
Carbon black	1333-86-4	1-5%	3.5mg/m ³	3.5mg/m ³	None
Polyester Resin	361615-5042-P	> 85%	Not listed	Not listed	None
Polypropylene	9003-07-0	1-5%	Not listed	Not listed	None
Organic pigment	361615-5025-P	1-5%	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 DataRoute(s) of Entry : Inhalation?

Yes

Skin?

No

Ingestion?

Possible but very unusual.

Health Hazards : No data available.

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/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4mg/m³) exposure group, but no pulmonary change was reported in the lowest (1mg/m³) exposure group, the most relevant level to potential human exposures.

Signs and Symptoms of Exposure : No symptoms expected under normal use.

Medical Conditions Generally Aggravated by Exposure : None

Emergency and First Aid Procedures :

Inhalation --- Remove to fresh air. If effects occur, consult medical personnel.

Eye --- In case of contact, do not rub eyes. Flush eyes with gently flowing (lukewarm) water for 15 minutes or until particles are removed. Have victim look right and left, up and down. If irritation occurs, seek medical attention. Do NOT attempt to manually remove anything stuck to the eye(s).

Ingestion --- If irritation or discomfort occur, seek medical attention immediately.

S H A R P

Date Revised: January 31, 2000

Date Issued : August 1, 1996

MATERIAL SAFETY DATA SHEET (2/2)

MSDS No. B-1008

Section 6. Physical Chemical Characteristics

BoilingMelting Point	: Not applicable	Specific Gravity	: 1.2
Vapor Pressure	: Not applicable	Solubility in Water	: Negligible
Vapor Density	: Not applicable	PH	: Not applicable
Evaporation Rate	: Not applicable	Viscosity	: Not applicable
Appearance	: Powder	Color	: Black
Odor	: Faint odor		

Section 7. Fire and Explosion Data

Flash Point (Method Used)	: No data available
Ignition Temperature	: 450°C
Flammable Limits	: (LEL); Not applicable (UEL); Not applicable
Extinguishing Media	: Water fog, foam, CO ₂ , dry chemicals
Special Fire Fighting Procedure	: Wear breathing apparatus in situations where large quantities are being burned.
Unusual Fire and Explosion Hazard	: If dispersed into the air, it may form an explosive mixture like most finely divided organic powders.
Sensitivity to Mechanical Impact	: None
Sensitivity to Static Charge	: When suspended in air, it is sensitive to static charges and combustible.

Section 8. Reactivity Data

Stability	: Stable
Incompatibility (Material to Avoid)	: Oxidizing materials
Hazardous Decomposition	: CO, CO ₂
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 : Good general ventilation should be sufficient for most conditions.

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 small amounts with a vacuum cleaner. Do not use a vacuum to clean up large amounts as a dust explosion may occur (as with any finely divided organic powder).

Waste Disposal Method : Waste material may be disposed 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	: None		
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