SHARP

MATERIAL SAFETY DATA SHEET (1/2)

Revised date: Apr. 8. 2008 Issued date: Feb. 9. 1996.

MSDS No.: B-1006

Section 1. Product Identification

Product Code: UX-10R, FO-16CR, UX-15CR, FO-15CR, UX-3CR, FO-3CR, NX-3CR, PRBNN2005SCZZ IMAGING FILM

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.

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(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				
Australia New Zealand	AUSTRALIA Sharp Corporation of Australia PTY. LTD.: (Phone) 02-9830-4600, 1800 807 820 NEW ZEALAND Sharp Corporation of New Zealand LTD.: (Phone) 09-634-2059				

Section 3. Ingredients

<u>Ingredients</u>	Cas No.	<u>Proportion</u>	<u>OSHA PEL</u>	ACGIH TLV	Other Limits
Polyethylene	25038-59-9	51.0%	_	_	_
terephthalate					
Carbon black	1333-86-4	8.5%	3.5mg/m3	3.5mg/m3	_
Ethylene-vinyl	24937-78-8	3.1%	_	_	_
acetate copolymer					
Ester wax	8015-86-9	5.6%	_	_	_
Paraffin wax	8002-74-2	12.5%	_	2mg/m3(fume)	_
Microcrystalline wax	63231-60-7	15.2%	_	_	_
Modified wax	8016-60-2	1.3%	_	_	_
Polyester resin	27923-68-8	1.3%	_	_	_
Others	_	1.5%	_	_	_

Section 4. Hazardous Identification (Emergency Overview)

This product is ink film for thermal transfer facsimile.

"Ink film" is a thin film coated with ink. It is no special hazard under normal use condition.

Section 5 . Health Hazard Data

Route(s) of Entry: Inhalation? Skin? Ingestion?

not applicable not applicable possible but very unusual

Health Hazards: The ingredients are not listed in ACGIH(1986) and OSHA(1989)

except carbon black and paraffin wax.

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.

Signs and Symptoms of Exposure: not applicable

Medical Conditions Generally Aggravated by Exposure: not applicable

Emergency and First Aid Procedures: not applicable

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Section 6. Physical Chemical Characteristics

Boiling/Melting Point m.p. about 70° C for ink Specific Gravity about 1 Vapor Pressure not applicable. Solubility in Water negligible Vapor Density not applicable PH not applicable negligible **Evaporation Rate** Viscosity not applicable Appearance thin film coated with ink Color black Odor slight wax odor

Section 7. Fire and Explosion Data

about 250° C for ink Flash Point (Method Used): Ignition Temperature: not applicable

Flammable Limits: (LEL); not applicable (UEL); not applicable Extinguishing Media: CO2, water, dry chemicals and foam etc.

Special Fire fighting Procedure: none Unusual Fire and Explosion Hazard: none

Sensitivity to Mechanical Impact: no hazardous effect by mechanical impact

Sensitivity to Static Charge: not applicable

Section 8. Reactivity data

Stability: stable Incompatibility (Materials to Avoid): none

Hazardous Decomposition: not applicable Hazardous Polymerization: not applicable

Section 9. Precautions for Safe Handling and Use

Personal Protection Information(Respiratory, Eye Protection and Protective Glove): not required

Engineering Control / Ventilation: not required Work / Hygienic Practice: none

Steps to be taken in case of Spill or Leak:

If rumple the product and wax layer peel off, sweep up or clean with vacuum cleaner. If it dirty skin, wash with water and soap. If it dirty clothes, wash by suitable method.

Waste Disposal Method:

Dispose in an approved incinerator or contract with licensed chemical disposal agency. Ensure conformity with governmental disposal regulations. (Dispose by the same method of ordinaly plastic products.)

Section 10. Regulatory Information

NFPA Rating (U.S.A.): no information WHMIS Legislation (Canada): not controlled Transport Information: no information UN No.: no information

Section 11. Other Information

IARC (1996) Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Reference:

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

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