

MATERIAL SAFETY DATA SHEET (1/2)
MSDS No. B-1006

Section 1. Product Identification

Product Code: UX10CR, FO16CR, PRBNN20055CZZ 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.

(Country)	(Name and Telephone Number)
U.S.A.	Sharp Electronics Corporation Telephone number for information: 201-529-8200 Emergency telephone number : 1-800-255-3924
Canada	Sharp Electronics of Canada Ltd. Telephone number for information: 416-890-2100 Emergency telephone number : 1-800-424-9300
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
Polyethylene terephthalate	25038-59-9	51.0%	—	—	—
Carbon black	1333-86-4	8.5%	3.5mg/m ³	3.5mg/m ³	—
Ethylene-vinyl acetate copolymer	24937-78-8	3.1%	—	—	—
Ester wax	8015-86-9	5.6%	—	—	—
Paraffin wax	8002-74-2	12.5%	—	2mg/m ³ (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 facsimil.

"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
 Vapor Pressure : not applicable.
 Vapor Density : not applicable
 Evaporation Rate : negligible
 Appearance : thin film coated with ink
 Odor : slight wax odor

Specific Gravity : about 1
 Solubility in Water : negligible
 PH : not applicable
 Viscosity : not applicable
 Color : black

Section 7. Fire and Explosion Data

Flash Point (Method Used) : about 250°C for ink
 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

Reference : IARC (1996) 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