

S H A R P

Data Revised: January 22, 2001

Date Issued: May 1, 2000

MATERIAL SAFETY DATA SHEET (1/2)

MSDS No. K-90011

Section 1. Product Identification

Product :

AJ-T20B / AJ-T20S (Black Ink)

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
Water	7732-18-5	30-40%	Not listed	Not listed	None
Sulfolane	126-33-0	25-35%	Not listed	Not listed	None
Carbon black	1333-86-4	15-25%	3.5mg/m ³	3.5mg/m ³	None
2-Pyrrolidone	616-45-5	5-10%	Not listed	Not listed	None
Polydimethylsiloxane copolymer	63148-62-9	<2%	Not listed	Not listed	None

Section 4. Hazardous Identification (Emergency Overview)

- Appearance: Black Liquid
- Odor: Slight odor
- May cause eye irritation
- Prolonged or repeated contact may cause skin irritation.

Section 5. Health Hazard Data

Route(s) of Entry : Inhalation? Skin? Ingestion?
Not Applicable Yes Yes

Health Hazards : Acute oral toxicity --- LD₅₀ >2,000mg/kg(Estimated from the data of constituent components.)
Skin irritation --- Prolonged or repeated contact may cause skin irritation.
Mutagenicity --- The result of Ames test is negative.

Carcinogenicity : NTP? IARC Monographs? OSHA Regulated?
No Yes (Group 2B) No

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. The carbon black in this product appears in a different form than the carbon black used in the IARC study. In this form, it is extremely unlikely for the carbon black to be released so as to result in inhalation.

S H A R P

MATERIAL SAFETY DATA SHEET (2/2)

MSDS No. K-90011

Section 5. Health Hazard Data**Emergency and First Aid Procedures:**

Inhalation: Remove patient to fresh air.

Skin: Wash affected area with plenty of soap and water.

Ingestion: Give plenty of water to drink. In cases of severe exposure, gastro-intestinal disturbances may develop. Seek medical advice if necessary.

Eye: Flush with water. Seek medical advice if necessary.

Section 6. Physical Chemical Characteristics

Boiling/Melting Point	: 199.4°F(93°C) / Not applicable	Specific Gravity	: 1.0
Vapor Pressure	: 20@20°C	Solubility in Water	: Soluble
Vapor Density	: Not Determined	PH	: 6 - 8
Evaporation Rate	: Not Determined	Viscosity	: 1 - 5
Appearance	: Liquid	Color	: Black
Odor	: Slight odor		

Section 7. Fire and Explosion Data

Flash Point (Method Used)	: >205°F(96°C) / Not Flammable	
Ignition Temperature	: Not Applicable	
Flammable Limits	: (LEL): Not applicable	(UEL): Not applicable
Extinguishing Media	: Not Determined	
Special Fire Fighting Procedure	: Not Determined	
Unusual Fire and Explosion Hazard	: Not Determined	
Sensitivity to Mechanical Impact	: Not Applicable	
Sensitivity to Static Charge	: Not Applicable	

Section 8. Reactivity Data

Stability	: Not Determined
Incompatibility (Material to Avoid)	: Not Determined
Hazardous Decomposition	: Not Determined
Hazardous Polymerization	: Not Determined

Section 9. Precautions for Safe Handling and Use**Personal Protection Information (Respiratory, Eye Protection and Protective Glove):**

Wear protective gloves and eye shields if there is a danger of excessive skin contact or contact with the eyes.

Engineering Control / Ventilation : No special requirements.**Steps to be taken in case of Spill or Leak** : Wipe off ink and wash with water.**Waste Disposal Method:** Waste material must be disposed in accordance with all federal, state and local environmental regulations.**Section 10. Regulatory Information**

NFPA Rating (U.S.A.)	: Health = 0	Flammability = 0	Reactivity = 0
WHMIS Legislation (Canada)	: Not a WHMIS control product.		
Transport Information	: Not classified as hazardous for transport.		
UN No.	: None allocated.		

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**Section 11.**

This information relates only to the specific material designated as supplied by the manufacturer. This information is supplied to us by the manufacturer and Sharp offers no warranties as to its accuracy and accepts no responsibilities for any typographical errors which may appear on these sheets. It is the responsibility of the user to determine the suitability of this product for each particular use.