



Safety Data Sheet (ISO form)

Date Prepared 2000/03/30

1. Product and Company Identification

Product Name RICOH THERMAL TRANSFER RIBBON TYPE B110A(C)

Company Name : Ricoh Company, Ltd.
 Department : Environment Safety Center, Corporate Environment Division
 Address : 3-6, Naka-magome 1-Chome Ohta-ku, Tokyo 143-8556 Japan
 Telephone Number : 03-3777-8183, Japan
 Emergency Telephone Number : 03-3777-8183, Japan
 Telefax Number : 03-3777-0811, Japan

2. Composition/Information on Ingredients

Substance or Preparation
 Preparation

Chemical Nature

Ingredients	CAS. No.	Contents (%)
Polyester Film	28038-69-9	65
Carnauba Wax	8015-86-8	21
Wax	Confidential	7
Carbon Black	1333-86-4	3
Resin	Confidential	4

Components Contributing to The Hazard

applicable for it mentioned below
 Their Chemical or Generic Name/Their Concentration or Concentration Range
 not relevant

%
%
%
%
%

3. Hazards Identification (Most Important Hazard)

Adverse Human Health Effects

Not applicable in normal use.

Carcinogenicity

Carbon Black was reclassified as a Group 2B by IARC in 1996 based on the result of only the inhalation study in rats. However there was not observed the incidence of tumors on the test results on dermal or oral studies. There will be no possibility to inhale the carbon black which will not be released from the product as a fine powder.

Environmental Effects

Not applicable in normal use.

Physical and Chemical Hazards

Not applicable in normal use.

The Classification of The Chemical Product

Not applicable

4. First-Aid Measures

Inhalation

Not applicable.

Skin Contact

Not skinsensitive in normal use.

Eye Contact

Immediately wash eyes with large amounts of water. If unsuccessful, get medical attention.

Ingestion

Induce vomiting. Seek medical attention immediately.

5. Fire-Fighting Measures

Extinguishing Media

CO₂, dry chemicals, foam or water.

Specific Method

No special fire protecting method is required.

6. Accidental Release Measures

Personal Precautions

Not applicable

Environment Precautions

Not applicable

Methods for Cleaning Up

Not applicable

7. Handling and Storage

Handling (technical measures, precautions, safe handling material)
Avoid chemicals, water and fire (for quality).

Storage (technical measures, storage conditions, packaging material)
Store in cool and dry place (for quality).

8. Exposure Controls/Personal Protection

- Respiratory Protections
None required under normal conditions of use.
 - Hand Protection
None required under normal conditions of use.
 - Eye Protection
None required under normal conditions of use.
 - Skin and Body Protection
None required under normal conditions of use.
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9. Physical and Chemical Properties

Physical State

Form : Ribbon
Color : Black
Odour : No odor

Information

pH : not applicable Measuring Temp. (°C) :-
Boiling Point (°C) : not applicable
Flash Point (°C) : not applicable
Explosion Properties (°C) : This product is considered a nonexplosive material under normal use condition.
Vapor Pressure (Pa) : not applicable Measuring Temp. (°C) :-
Vapor Density (AIR=1) : not applicable
Density (g/cm³) : not available Measuring Temp. (°C) :-

Solubility

Water Solubility (g/L) : Insoluble
Water Solubility Measuring Temp. (°C) :-
Other Solvent name :-
Other Solvent Solubility (g/L) :-
Other Solvent Solubility Measuring Temp. (°C) :-

Octanol/Water Partition Coefficient
not known

10. Stability and Reactivity

- Conditions to Avoid
Not applicable in normal use.
- Materials to Avoid
Not applicable in normal use.
- Hazardous Decomposition Products
will not occur

Product Name: RICON THERMAL TRANSFER RIBBON TYPE B1104 CO Maker: Ryoichi Shimura Date: 2001/12/25

11. Toxicological Information

Acute Toxicity

Acute Oral Toxicity : (not available)
 Acute Dermal Toxicity : not available
 Acute Inhalation Toxicity : not applicable

Sensitization

Acute Skin Irritation : not available
 Acute Eye Irritation : not applied
 Acute Allergenic Effects : non-skinsensitive

Specific Effects

Carcinogenicity :

In 1998 IARC reevaluated Carbon Black as a Group 2B carcinogen (possible human carcinogen). This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. The latter 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 have not demonstrated an association between carbon black and lung tumors. Moreover, 2-years cancer bioassay using a typical toner preparation containing carbon black did not demonstrate an association between toner exposure and tumor development in rats.

Mutagenicity : negative

Effects on the Reproductive System : No data is available on this product.

Teratogenic : not available

12. Ecological Information

Persistence/Degradability : not known

Bioaccumulation : not available

Ecotoxicity

Acute Toxicity for Fish : not available (mg/kg/96hr)
 Acute Toxicity for Daphnia : not available (mg/kg/48hr)
 Algae Inhibition Test : not available (mg/kg/72hr)

13. Disposal Consideration

Recommended Methods for Safe Environmental y Preferred Disposal

Used ribbon should be disposed of in an environmentally appropriate manner and in accordance with governmental regulation.

Product Name: RICOH THERMAL TRANSFER RIBBON TYPE R1124ACK1 Q&w : Riyoichi Shiguro Date : 2001/12/28

14. Transport Information

International Regulations

RID/ADR : not applicable

DOT 49 CFR : not applicable

ADR : not applicable

IMDG Code : not applicable

ICAO-TI/IATA-DGR : not applicable

The UN Classification Number : not applicable

Specific Precautionary Transport Measures

Store in cool and dry place.

Specific Materials to Avoid

None in normal use.

15. Regulation Information

Regulations

not known

16. Other Information

References:

IARC (1996) "IARC Monograph 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, pp149-281