

Product name: PC-401, PC-402RF, PC-404RF, PC-451, PC-501,
PC-551, PC-70, PC-71RF, PC-72RF, PC74RF, PC-75 ink film

Issuing Date: 29-July-2008
Revision Date: 10-November-2012
Version: 3
SDS No: SP6-01-EUUSOTHER

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name PC-401, PC-402RF, PC-404RF, PC-451, PC-501, PC-551, PC-70, PC-71RF, PC-72RF, PC74RF, PC-75 ink film

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant Identified Use(s) These products are thermal ink films for Brother Industries, Ltd. facsimile receivers. These products should be used as supplied by Brother and for use in the products stated. Information provided on this SDS is only consistent with the use specified by Brother.

1.3 Details of the supplier of the safety data sheet

Manufacturer Brother Industries, Ltd.
15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan
Telephone (for information): +81-52-824-2735

Importer (USA) Brother International Corporation
200 Crossing Boulevard, Bridgewater, NJ 08807, USA
Telephone (for information): +1-800-284-4329

Importer (Canada) Brother International Corporation (Canada) Ltd.
1 Hotel de Ville, Dollard des Ormeaux, Quebec, H9B 3H6, Canada
Telephone (for information): +1-514-685-0600

Importer (Europe) Brother International Europe Ltd.
Brother House, 1 Tame Street, Guide Bridge, Audenshaw, Manchester M34 5JE, UK
Telephone (for information): +44-161-330-6531

Importer (Australia) Brother International (Aust.) Pty. Ltd. ACN 001 393 835
Level 3, Building A, 11 Talavera Road, Macquarie Park, NSW 2113, Australia
Telephone (for information): +61-2-9887-4344

E-mail Address sds.info@brother.co.jp

1.4 Emergency telephone number

Emergency Telephone (24 hours) CHEMTREC
+1-703-527-3887 (International)
+1-800-424-9300 (North America)

For France only:
Antipoison Center telephone number: ORFILA +33-1-45-425-959

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Not classified as hazardous

Classification according to Directive 1999/45/EC

Not classified as hazardous

Australia Classification

Not classified as hazardous according to the criteria of NOHSC

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard pictograms

None

Signal Word

None

Hazard Statements

None

Precautionary statements

None

2.3 Other hazards

This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description of the mixture: Ink on substrate film (Mixture).

Chemical Name	CAS-No	EC-No	w/w%	Classification (67/548/EEC)	Classification (EU Reg. 1272/2008)
Polyethylene telephthalate	25038-59-9	-	48-54	Not classified	Not classified
Paraffin wax	8002-74-2	232-315-6	23-28	Not classified	Not classified
Carbon Black	1333-86-4	215-609-9	6-9	Not classified	Not classified
Resin	**	**	5-7	Not classified	Not classified
Ethylene-vinyl acetate copolymer	24937-78-8	-	4-5	Not classified	Not classified
Carnauba wax	8015-86-9	232-399-4	4-6	Not classified	Not classified
Pigment	**	**	0.5-1	Not classified	Not classified

For the full text of R-phrases and H-Statements see Section 16

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SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	If symptoms persist, obtain medical attention.
Inhalation	Not an expected route of exposure. If symptoms develop obtain medical attention.
Skin contact	Wash affected skin with plenty of water or soap and water.
Eye contact	Obtain medical attention. If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes.
Ingestion	Obtain immediate medical attention. Wash out mouth with water and give 100-200 ml of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

No specific effects and/or symptoms have been reported or known.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable Extinguishing Media	Extinguish preferably with dry chemical, carbon dioxide, water, foam.
Unsuitable Extinguishing Media	None.

5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors: Carbon oxides.

5.3 Advice for firefighters

Use appropriate respirator for carbon monoxide and carbon dioxide. Wear positive pressure self-contained breathing apparatus (SCBA) during the attack phase of firefighting operations and during cleanup in enclosed or poorly ventilated areas immediately after a fire. Personnel not having suitable respiratory protection must leave the area to prevent significant exposure to toxic combustion gases from any source.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Not normally required.

6.2 Environmental precautions

Not normally required.

6.3 Methods and materials for containment and cleaning up

Not applicable.

6.4 Reference to other sections

For personal protection: See section 8.
For disposal considerations: See section 13.

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SECTION 7: Handling and storage

- 7.1 Precautions for safe handling** Keep out of the reach of children.
- 7.2 Conditions for safe storage, including any incompatibilities** Keep away from oxidizing agents.
- 7.3 Specific end use(s)** These products are thermal ink films for Brother Industries, Ltd. facsimile receivers. These products should be used as supplied by Brother and for use in the products stated. Information provided on this SDS is only consistent with the use specified by Brother.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical Name	Paraffin wax 8002-74-2
ACGIH TLV	TWA: 2 mg/m ³ fume
OSHA PEL	-
European Union	-
The United Kingdom	STEL: 6 mg/m ³ TWA: 2 mg/m ³
France	TWA: 2 mg/m ³
Spain	TWA: 2 mg/m ³
Portugal	TWA: 2 mg/m ³
Finland	TWA: 1 mg/m ³
Denmark	TWA: 2 mg/m ³
Switzerland	TWA: 2 mg/m ³
Poland	TWA: 2 mg/m ³
Norway	TWA: 2 mg/m ³ STEL: 4 mg/m ³
Ireland	TWA: 2 mg/m ³ STEL: 6 mg/m ³
Chemical Name	Carbon Black 1333-86-4
ACGIH TLV	TWA: 3 mg/m ³ inhalable fraction
OSHA PEL	TWA: 3.5 mg/m ³
European Union	-
The United Kingdom	STEL: 7 mg/m ³ TWA: 3.5 mg/m ³
France	TWA: 3.5 mg/m ³
Spain	TWA: 3.5 mg/m ³
Germany	Carc
Portugal	TWA: 3.5 mg/m ³
Finland	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³
Denmark	TWA: 3.5 mg/m ³
Poland	TWA: 4.0 mg/m ³
Norway	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³
Ireland	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³

8.2 Exposure controls

Appropriate engineering controls Good general ventilation should be sufficient under normal use.

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Personal protective equipment	Not normally required. For use other than in normal operating procedures (such as in the event of large spill), the following should be applied:
Eye Protection	None under normal use.
Hand Protection	None under normal use. In case of prolonged contact wear protective gloves.
Skin and body protection	None under normal use.
Respiratory protection	None under normal use.
Environmental Exposure Controls	Not normally required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state	Film
Color	Black
Odor	Odorless
Odor Threshold	No information available
pH	Not applicable
Melting point/freezing point	> 250 °C Film
Initial boiling point and boiling range	Not applicable
Flash Point	Not applicable
Evaporation rate	Not applicable
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	No information available
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	1.4 (H ₂ O=1) Film
Solubility(ies)	Insoluble (water)
Partition coefficient: n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	Not applicable
Explosive properties	Not explosive
Oxidizing properties	No information available

9.2 Other information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity	No information available.
10.2 Chemical stability	Stable.
10.3 Possibility of hazardous reactions	No information available.
10.4 Conditions to avoid	Keep at a temperature not exceeding 200 °C. Avoid friction, sparks, or other means of ignition.
10.5 Incompatible materials	Strong oxidizing agents.
10.6 Hazardous decomposition products	Contains: Carbon monoxide (CO). Carbon dioxide (CO ₂).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Inhalation	No information available.
Eye contact	No information available.
Skin contact	No information available.
Ingestion	No information available.

Skin corrosion/irritation No information available.

Serious eye damage/irritation No information available.

Respiratory or skin sensitisation No information available.

Mutagenicity No information available.

Carcinogenicity Carbon Black: In 1996, the IARC re-evaluated 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.

Other ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA.

SECTION 12: Ecological information

12.1 Toxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Carbon Black 1333-86-4			EC ₅₀ : >5600 mg/L 24 h (Daphnia magna)

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential No information available.

12.4 Mobility in soil No information available.

12.5 Results of PBT and vPvB assessment This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects No information available.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods Dispose of in accordance with Federal, State, and local regulations.

SECTION 14: Transport information

Not classified as hazardous for transport

14.1 UN Number None
14.2 UN proper shipping name None
14.3 Transport hazard class(es) None
14.4 Packing Group None
14.5 Environmental hazards None
14.6 Special precautions for user None
14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code Not applicable

Not regulated under DOT, IMDG, ADR, RID, IATA.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU: Not classified as dangerous for supply/use. (1999/45/EC)
USA: All chemical substances contained in this product are and had been listed on the TSCA Chemical Substances Inventory, and none is subject to any of the following TSCA requirements: section 4 test rules; proposed or final section 5(a)(2) significant new use rules; section 5(e) consent orders; section 8(a) preliminary assessment information rules; and section 8(d) health and safety data reporting rules.
Canada: WHMIS: Not applicable. (Manufactured article)

15.2 Chemical Safety Assessment No.

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SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3 None

Full text of H-Statements referred to under sections 2 and 3 None

Additional information The information relates only to this product. It may not be valid, if used in combination with any other materials or in any other process, and it is based on our best knowledge as of the date of preparation (revision).

Revision Note Updated for compliance with EU Regulations 453/2010 and 172/2008 (CLP).

References: U.S. 29CFR Part 1910
ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans World Health Organization
EU Directive 91/322/EEC and 2000/39/EC
NTP 11th Report on Carcinogens

Abbreviations: ACGIH: American Conference of Governmental Industrial Hygienists
ADR: European Agreement concerning the International carriage of Dangerous goods by Road (EU)
DOT: Department Of Transportation (US)
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods
NOHSC: National Occupational Health and Safety Commission (Australia)
NTP: National Toxicology Program (US)
OSHA: Occupational Safety and Health Administration (US)
PEL: Permissible Exposure Limit
RID: Regulations concerning the International carriage of goods by Rail (EU)
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value (ACGIH)
TSCA: Toxic Substances Control Act (US)
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Material Information System (Canada)