

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

Revision Date: 30-Apr-2021

Issuing Date: 29-Jul-2008

Revision Number: 4.1

Safety data sheet number: SP6-01

## **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

**Product Form** Mixture

**Safety data sheet number** SP6-01

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

**Relevant identified uses** 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.

**Uses advised against** No information available

### **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** (Europe)  
Brother International Europe Ltd.  
1 Tame Street, Audenshaw, Manchester M34 5JE, UK  
Brother International (Nederland) B.V.  
Zanderij 25, 1185 ZM Amstelveen, The Netherlands  
Telephone (for information): +44-161-330-6531

### **For further information, please contact**

**E-mail address** sds.info@brother.co.jp

### **1.4. Emergency telephone number**

**Emergency Telephone** CHEMTREC +1-703-527-3887 (International)

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

## **Section 2: Hazard(s) identification**

### **2.1. Classification of the substance or mixture**

**Regulation (EC) No 1272/2008**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

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**2.2. Label elements**

**Regulation (EC) No 1272/2008**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

**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**

**3.1 Substances**

Not applicable

**3.2 Mixtures**

Chemical name	CAS No	EC No	EC Index No	Weight-%	Specific concentration limit (SCL)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Polyethylene terephthalate	25038-59-9	425-750-1	-	48-54	-	Not classified	Not applicable
Paraffin wax	8002-74-2	232-315-6	-	23-28	-	Not classified	Registered
Carbon Black	1333-86-4	215-609-9 435-640-3	-	6-9	-	Not classified	01-2119384822-32-XXXX
Resin	**	**	-	5-7	-	Not classified	Not applicable
Carnauba wax	8015-86-9	232-399-4	-	4-6	-	Not classified	Not applicable
Ethylene-vinyl acetate copolymer	24937-78-8	429-840-1	-	4-5	-	Not classified	Not applicable
Pigment	**	-	-	0.5-1	-	Not classified	Not applicable

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Full text of H- and EUH-phrases: see section 16

**Section 4: First aid measures**

**4.1. Description of first aid measures**

**General advice** If symptoms persist, call a physician.

**Inhalation** Not an expected route of exposure. If symptoms persist, call a physician.

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<b>Eye contact</b>	Get immediate medical advice/attention. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes.
<b>Skin contact:</b>	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
<b>Ingestion</b>	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**

**Symptoms** No specific effects and/or symptoms have been reported or known

**4.3. Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**Section 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable Extinguishing Media** Dry chemical, CO<sub>2</sub>, water spray or regular foam

**Unsuitable extinguishing media** None

**5.2. Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical** Thermal decomposition can lead to release of irritating and toxic gases and vapors :  
Carbon oxides

**5.3. Advice for firefighters**

**Special protective equipment for fire-fighters** 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**

**For non-emergency personnel** Not normally required.

**For emergency responders** Use personal protection recommended in Section 8.

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**6.2. Environmental precautions**

**Environmental precautions** Not normally required.

**6.3. Methods and material for containment and cleaning up**

**Methods for containment** Not applicable.

**Methods for cleaning up** Not applicable

**Prevention of secondary hazards** No information available.

**6.4. Reference to other sections**

**Reference to other sections** See section 8 for more information. See section 13 for more information.

**Section 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling** Keep out of the reach of children.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep away from oxidizing agents.

**7.3. Specific end use(s)**

**Specific 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.

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## Section 8: Exposure controls and personal protection

### 8.1. Control parameters

#### Exposure Limits

Chemical name	European Union	United Kingdom	France	Spain	Germany
Polyethylene terephthalate 25038-59-9	-	-	-	-	TWA: 1.25 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>
Paraffin wax 8002-74-2	-	TWA: 2 mg/m <sup>3</sup> STEL: 6 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	-
Carbon Black 1333-86-4	-	TWA: 3.5 mg/m <sup>3</sup> STEL: 7 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup>	-
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Paraffin wax 8002-74-2	-	TWA: 2 mg/m <sup>3</sup>	-	TWA: 1 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
Carbon Black 1333-86-4	-	TWA: 3 mg/m <sup>3</sup>	-	TWA: 3.5 mg/m <sup>3</sup> STEL: 7 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup>
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Paraffin wax 8002-74-2	-	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> STEL: 4 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> STEL: 6 mg/m <sup>3</sup>
Carbon Black 1333-86-4	-	-	TWA: 4 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup> STEL: 7 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup> STEL: 15 mg/m <sup>3</sup>

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

### 8.2. Exposure controls

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

**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/face protection** None under normal use conditions.

**Hand protection** None under normal use conditions.  
. If there is a risk of contact: Protective gloves.

**Skin and body protection** None under normal use conditions

**Respiratory protection** None under normal use conditions.

**Environmental exposure controls** Not normally required.

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## 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

#### Property

#### Values

#### Remarks • Method

pH	Not applicable	None known
pH (as aqueous solution)	Not applicable	None known
Melting point / freezing point	> 250 °C ( film )	
Boiling point / boiling range	Not applicable	None known
Flash point	No data available	None known
Evaporation rate	Not applicable	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	Not applicable	None known
Vapor density	Not applicable	None known
Relative density	1.4	(H <sub>2</sub> O=1)
Water solubility	Insoluble in water	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	Not applicable	None known
Dynamic viscosity	Not applicable	None known
Explosive properties	Not explosive	No information available
Oxidizing properties	No information available	

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No information available

#### 9.2.2. Other safety characteristics

No information available

## Section 10: Stability and reactivity

### 10.1. Reactivity

No information available.

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**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

No information available.

**10.4. Conditions to avoid**

Keep at a temperature not exceeding 200 °C, Keep away from heat. Avoid friction, sparks, or other means of ignition

**10.5. Incompatible materials**

Strong oxidizing agents

**10.6. Hazardous decomposition products**

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>)

**Section 11: Toxicological information**

**11.1. Information on toxicological effects**

**Product Information**

<b>Inhalation</b>	No information available
<b>Eye contact</b>	No information available
<b>Skin contact:</b>	No information available
<b>Ingestion</b>	No information available

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	6,002.00 mg/kg
<b>ATEmix (dermal)</b>	3,499.10 mg/kg

<b>Skin corrosion/irritation</b>	No information available
<b>Serious eye damage/eye irritation</b>	No information available
<b>Respiratory or skin sensitization</b>	No information available
<b>Germ cell mutagenicity</b>	No information available

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**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

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available

**Aspiration hazard** No information available.

**Potential health effects** Eye : May cause slight irritation  
Skin : Prolonged exposure may cause skin irritation  
Ingestion : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea  
Inhalation : Not an expected route of exposure Over exposure may cause respiratory irritation.

**11.2. Information on other hazards**

No information available

**Section 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicity**

Contains 0 % of components with unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Carbon Black	-	1000:96 h Brachydanio rerio mg/L LC50	-	-

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

No information available.



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**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. Endocrine disrupting properties**

No information available.

**12.7. Other adverse effects**

No information available.

**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

Dispose in accordance with federal, state and local regulations.

**Section 14: Transport information**

**IMDG**

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Marine pollutant	Not applicable
14.6 Special Provisions	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable

**RID**

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

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**ADR**

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

**IATA**

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

**Section 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU-Regulations**

\* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XVII.

\* Contains no substance listed in REACH Regulation (EC) No.1907/2006 Candidate List for Authorization.

\* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XIV.

**National Regulations**

No information available

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out.

**Section 16: Other information**

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Legend**

SVHC: Substances of Very High Concern for Authorization:

TWA TWA (time-weighted average)

STEL

STEL (Short Term Exposure Limit)

\*\* Trade secret

**Key literature references and sources for data**

No information available

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**Revision Note**

Importer information has been changed.

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**Disclaimer**

**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).**