

# Material Safety Data Sheet (MSDS)

Issue date: Aug. 3, 2011

MSDS#: 11QA0010

Revised date: Feb. 15, 2013

rev. 4

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## 1. Product and Company identification

Product name : Black ink ribbon F  
Ink ribbon for LC-2YBP9/LC-3YBP9/LC-4YBP9/  
LC-5YBP9/LC-4YBF9/LC-5YBF9/LC-4GBF9/LC-5GBF9  
Company : SEIKO EPSON CORP.  
Address : 6925 Tazawa, Toyoshina, Azumino-shi, Nagano-ken  
399-8285, Japan  
Telephone No. : 0263-87-5814  
Fax. No. : 0263-87-5813  
E-mail address : takizawa.mitsunori@exc.epson.co.jp  
Emergency phone number : Giftnotruf Berlin +49(0)30 30686 790

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## 2. Hazards Identification

### 2.1. Classification of the substance or mixture

This product is not classed as hazardous to health by directive 1999/45/EC

### 2.2. Label Elements

Not applicable

### 2.3. Other Hazards

No data is available regarding the product itself.

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## 3. Composition/Information on Ingredients

Substance/Mixture : Mixture

General product description : Ink ribbon

| Composition                           | CAS No.      | EEC No.      | EU registration No.          | % By Weight  | EU Symbols | EU R-phrase | EU OELs | Remark |
|---------------------------------------|--------------|--------------|------------------------------|--------------|------------|-------------|---------|--------|
| Carbon black                          | 1333-86-4    | 215-609-9    | Not available for the moment | 8            | None       | None        | None    | None   |
| Coloring Material                     | Trade secret | Trade secret | Not available for the moment | Trade secret | None       | None        | None    | None   |
| Wax                                   | Trade secret | Trade secret | Not available for the moment | Trade secret | None       | None        | None    | None   |
| Resin                                 | Trade secret | Trade secret | Not available for the moment | Trade secret | None       | None        | None    | None   |
| Additive agent                        | Trade secret | Trade secret | Not available for the moment | Trade secret | None       | None        | None    | None   |
| Polyethylene terephthalate (PET) film | 25038-59-9   | None         | Not available for the moment | Trade secret | None       | None        | None    | None   |

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#### 4. First Aid Measures

##### Description of first aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor.  
NEVER induce swallowing in an unconscious person.

|              |   |
|--------------|---|
| Eye contact  | :Rinse thoroughly with a large volume of water immediately.<br>Then consult an eye specialist.  |
| Skin contact | :Wash off with a large volume of water and soap.  |
| Inhalation   | : Not applicable  |
| Ingestion    | : In the event of ingestion, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.<br><br>If swallowed accidentally, call a doctor to assess the need for monitoring and subsequent treatment in hospital. |

Most important symptoms and effects, both acute and delayed  
No data is available regarding the product itself.

Indication of any immediate medical attention and special treatment needed  
No data is available regarding the product itself.

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#### 5. Fire-Fighting Measures

|   |  |
|---|--|
| Extinguishing media                                   | : Water mist, Foam, Dry powder, CO2 gas, other |
| Unsuitable extinguishing media                        | : Not applicable                               |
| Special hazards arising from the substance or mixture | : No information                               |
| Advice for firefighters                               | : No special measures required.                |

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#### 6. Accidental Release Measures

|   |  |
|---|--|
| Personal precautions, protective equipment and emergency procedures | : Consult the safety measures listed under headings 7 and 8. |
| Environmental precautions   | : Do not pour into drains or waterways.                      |
| Methods and materials for containment and cleaning up               | : If inadvertently released, rewind ribbon.                  |
| Reference to other sections   | : Section 8,13   |

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#### 7. Handling and Storage Precautions

The regulations relating to storage premises apply to workshops where the product is handled.

Precautions for safe handling: No special. For personal safety, see section 8.

Conditions for safe storage, including any incompatibilities:

Should be stored in dark and cool place.

Specific end use(s) : Thermal transfer ribbon

8. Exposure Controls/ Personal Protection

Control parameters

Exposure limit values :

Substance : Carbon black CAS № : 1333-86-4

| Country        | Limit value-Eight hours |       | Limit value-Short term |       |
|----------------|-------------------------|-------|------------------------|-------|
|                | ppm                     | mg/m3 | ppm                    | mg/m3 |
| United Kingdom |                         | 3.5   |                        | 7     |
| France         |                         | 3.5   |                        |       |
| Germany        |                         |       |                        |       |
| USA-OSHA       |                         | 3.5   |                        | 7     |

Exposure controls

Appropriate engineering controls: Not applicable

Individual protection measures, such as personal protective equipment:

Use personal protection equipment as per Directive 89/686/EEC.

Eye/face protection : Not applicable in normal conditions of use.

Skin protection

Hand protection : Wear protective gloves when required.

Other skin protection : Wear suitable protective clothing when required.

Respiratory protection : Not applicable in normal conditions of use.

For further information, see section 11 of S.D.S. - Toxicological information.

Environmental exposure controls: Not applicable in normal conditions of use.

9. Physical and Chemical Properties

Physical appearance, color, etc. : Polyethylene terephthalate film coated on one side thereof with black ink wrapped around center core.

pH : not relevant

Melting point/freezing point : No data available

Initial boiling point and boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : This product is not classed as flammable.

Upper/lower flammability or explosive limits: No data available

Vapor pressure : No data available

Vapor density : No data available

Relative density : No data available

Solubility(ies) : Negligible(water)

Partition coefficient: n-octanol/water : No data available

|                           |                     |
|---------------------------|---------------------|
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity                 | : No data available |
| Explosive properties      | : No data available |
| Oxidising properties      | : No data available |
| Other information         | : No data available |

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#### 10. Stability and Reactivity

|                                     |   |
|-------------------------------------|---|
| Reactivity                          | :The product is stable at the handling and storage conditions recommended per section 7 of the safety data sheet, |
| Chemical stability                  | :The product is stable at the handling and storage conditions recommended per section 7 of the safety data sheet, |
| Possibility of hazardous reactions: | No hazardous reaction when handled and stored according to provisions.  |
| Conditions to avoid                 | :High temperature, High humidity, direct sunlight   |
| Incompatible materials:             | None  |
| Hazardous decomposition products:   | No dangerous decomposition products occur under normal storage and use conditions.                                |

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#### 11. Toxicological information

|                           |  |
|---------------------------|--|
| Acute toxicity            | : No data is available regarding the product itself. |
| Irritation                | : No data is available regarding the product itself. |
| Corrosivity               | : No data is available regarding the product itself. |
| Sensitization             | : No data is available regarding the product itself. |
| Repeated dose toxicity    | : No data is available regarding the product itself. |
| Carcinogenicity           | : No data is available regarding the product itself. |
| Mutagenicity              | : No data is available regarding the product itself. |
| Toxicity for reproduction | : No data is available regarding the product itself. |
| Other data                | : No data is available regarding the product itself. |
| Carbon black 1333-86-4    | : IARC Group 2B Possibility carcinogenic to humans   |

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#### 12. Ecological information

|                                    |                        |
|------------------------------------|------------------------|
| Toxicity                           | : No data is available |
| Persistence and degradability:     | No data is available   |
| Bioaccumulative potential          | : No data is available |
| Mobility in soil                   | : No data is available |
| Results of PBT and vPvB assessment | : No data is available |
| Other adverse effects              | : No data is available |

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### 13. Disposal Considerations

Waste treatment methods :

Do not pour into drains or waterways.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not dispose of waste into the environment.

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### 14. Transport Precautions

UN number : Not applicable

UN proper shipping name : Not applicable

Transport hazard class(es) : Not applicable

Packing group : Not applicable

Environmental hazards : Not applicable

Special precautions for user : No special

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code :  
Not applicable

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### 15. Applicable regulations

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

EU regulations

Authorisations and/or restrictions on use : Not applicable

Other EU regulations : No data is available

Chemical Safety Assessment :

No Chemical Safety Assessment has been carried out for this mixture.

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### 16. Disclaimer

The above mentioned data correspond to our present state of knowledge and experience, but no warranty is made. It could be revised by new perception.

Users should consider these data only as a supplement to other information and must make independent determination of the suitability and completeness of information from all sources to ensure proper use and disposal of the materials and safety and health of employees and customers.

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<Revision history>

Rev.2 Compliant with GHS.

Rev.3 Revise of applicable regulations

Rev.4 Revise composition table

# Material Safety Data Sheet (MSDS)

Issue date: Aug. 3, 2011

MSDS#: 11QA004

Revised date: Feb. 15, 2013

rev.4

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## 17. Product and Company identification

Product name : Standard PET receptor tape  
Receptor tape for LC-2RBP9/LC-3RBP9/LC-4RBP9/  
LC-5RBP9/LC-6RBP9/LC-7RBP9/LC-2YBP9  
LC-3YBP9/LC-4YBP9/LC-5YBP9/LC-6YBP9  
LC-7YBP9/LC-4BWV9/LC-4YBF9/LC-5YBF9/  
LC-4GBF9/LC-5GBF9/LC-2WBN9/LC-3WBN9  
LC-4WBN9/LC-5WBN9/LC-6WBN9/LC-7WBN9/  
LC-3WRN9/LC-4WRN9/LC-5WRN9/LC-4WLN9/  
LC-2TBN9/LC-3TBN9/LC-4TBN9/LC-5TBN9/  
LC-6TBN9/LC-7TBN9/LC-4TWN9/LC-5TWN9/  
LC-3YBW9/LC-4YBW9/LC-5YBW9/LC-3TBW9/  
LC-4TBW9/LC-5TBW9/LC-3WBW9/LC-4WBW9/  
LC-5WBW9/LC-6WBC9/LC-7WBC9/LC-5BWV9

Company : SEIKO EPSON CORP.  
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E-mail address : takizawa.mitsunori@exc.epson.co.jp  
Emergency phone number : Giftnotruf Berlin +49(0)30 30686 790

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## 18. Hazards Identification

GHS Classification  
This product is not classed as hazardous to health by directive 1999/45/EC

GHS Label Elements Including Precautionary Statements : Not applicable

Hazard Statement :None  
Toxicological information :None  
Ecological Information :None

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## 19. Composition/Information on Ingredients

Substance/Mixture :Mixture

| Composition   | Material name                         |                           |                         | CAS No.      | EEC No.      | EU registration No.          | % By Weight  | EU Symbols | EU R-phrase | EU OELs | Remark |
|---------------|---------------------------------------|---------------------------|-------------------------|--------------|--------------|------------------------------|--------------|------------|-------------|---------|--------|
|               | Transparent/ Colored                  | Transparent               | Colored                 |              |              |                              |              |            |             |         |        |
| Coating layer | Polyester series resin                |                           |                         | Trade secret | Trade secret | Not available for the moment | Trade secret | None       | None        | None    | None   |
| Base material | Polyethylene terephthalate (PET) film |                           |                         | 25038-59-9   | None         | Not available for the moment | Trade secret | None       | None        | None    | None   |
| Primer layer  |                                       | Polyurethane series resin |                         | Trade secret | Trade secret | Not available for the moment | Trade secret | None       | None        | None    | None   |
| Color layer   |                                       |                           | Polyurethane series ink | Trade secret | Trade secret | Not available for the moment | Trade secret | None       | None        | None    | None   |
| Adhesive      | Acrylic adhesive agent                |                           |                         | Trade secret | Trade secret | Not available for the moment | Trade secret | None       | None        | None    | None   |
| Liner paper   | Siliconized polyethylene film         |                           |                         | Trade secret | Trade secret | Not available for the moment | Trade secret | None       | None        | None    | None   |
| Core          | Alkyl benzene sulfonate (ABS)         |                           |                         | Trade secret | Trade secret | Not available for the moment | Trade secret | None       | None        | None    | None   |

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## 20. First Aid Measures

|              |   |
|--------------|---|
| Eye contact  | :Rinse thoroughly with clean water.<br>If there is foreign material in eyes or wound or pain consult an eye specialist. |
| Skin contact | :If irritation or other aberrance happens, consult a physician.   |
| Ingestion    | : Induce vomiting if possible. If aberrance happens, consult a physician.   |

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## 21. Fire-Fighting Measures

|                      |  |
|----------------------|--|
| Extinguishing method | :Use same method as normal fire.   |
| Extinguishing media  | :A large volume of water, extinguish agent (powder, bubble), carbon dioxide. |

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## 22. Accidental Release Measures

Not necessary.

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## 23. Handling and Storage Precautions

|          |   |
|----------|---|
| Handling | : This tape is for printing.<br>Do not use for electrical insulation.<br>Wipe off oil or water on the surface where this tape is stuck before sticking. |
| Storage  | :Keep away from direct sunlight and store in cool place.  |

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#### 24. Exposure Controls/ Personal Protection

|                                 |                   |
|---------------------------------|-------------------|
| Control limit                   | : Not applicable. |
| Occupational exposure limits    | : Not applicable. |
| Facility and equipment measures | : Not required.   |
| Protective equipment:           |                   |
| - Respiratory equipment:        | Not required.     |
| - Safety goggles:               | Not required.     |
| - Protective gloves:            | Not required.     |
| - Protective suit:              | Not required.     |

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#### 25. Physical and Chemical Properties

|                                  |  |
|----------------------------------|--|
| Physical appearance, color, etc. | : Colored roll adhesive tape with paper liner, wrapped around center core. |
|                                  | - As white colored tape -  |
| Specific gravity                 | :No data (1.4 as polyethylene terephthalate)                               |
| Melting point                    | :No data (255 degree C as polyethylene terephthalate)                      |
| Flash point                      | :290 degree C  |
| Ignition temperature             | :442 degree C  |
| Fusibility                       | :Water: Insoluble  |

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#### 26. Stability and Reactivity

|                |  |
|----------------|--|
| Combustibility | :Yes (It will burn, if there is a source of ignition.) |
| Inflammability | :No  |
| Explosiveness  | :No  |
| Reactivity     | :No  |
| Stability      | :Stable  |

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#### 27. Toxicological information

|                   |          |
|-------------------|----------|
| Irritating nature | :No      |
| Sensitization     | :No data |
| Mutagenicity      | :No data |
| Acute toxicity    | :No data |

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#### 28. Ecological information

|                                      |  |
|--------------------------------------|--|
| Ozone depleting substance            | :Not used  |
| Specific brominated flame retardants | :Not used  |
| Hormone disrupting chemicals         | :Not used  |
| Harmful heavy metal                  | : White ink pigment (in Oxidized titanium)<br>Cadmium, Hexavalent chromium, mercury<br>(Less than detection limit.)<br>lead (Equal or less than 30ppm)<br>Others are not used. |
| Chlorinated compounds                | :Infinitesimal quantity as bleaching agent in<br>papermaking process.  |
| Degradability                        | :No data   |
| Accumulative properties              | :No data   |
| Fish toxicity                        | :No data   |

Disposal prohibition :Do not dispose on the ocean, waterside and outdoors to prevent a marine organism and birds from taking it in.

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#### 29. Disposal Considerations

Disposal :Nothing  
Incineration :Nothing (Incinerate 800 degree C or above.)

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#### 30. Transport Precautions

Nothing. Transport as general transported material.  
Transport careful enough to prevent falling over, drop and cargo collapse.  
UN classification/UN number : Not applicable  
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code :  
Not applicable

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#### 31. Applicable regulations

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

##### EU Information

Regulation (EC) No 2037/2000: Is not subject

Regulation (EC) No 850/2004: Is not subject

Regulation (EC) No 689/2008: Is not subject

Chemical Safety Assessment :

No Chemical Safety Assessment has been carried out for this mixture.

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#### 32. Disclaimer

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