

# Material Safety Data Sheet (MSDS)

Issue date: Aug. 3, 2011

MSDS#: 11QA014

Revised date: Feb. 15, 2013

rev. 4

## 1. Product and Company identification

Product name : White ink ribbon  
Ink ribbon for LC-4BWV9/LC-4TWN9/LC-5TWN9/  
LC-5BWV9  
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

## 2. 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

Other Hazards

No data is available regarding the product itself.

## 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
Titanium dioxide	13463-67-7	236-675-5	Not available for the moment	Trade secret	None	None	None	None
Ethylene copolymerized resin	Trade secret	Trade secret	Not available for the moment	Trade secret	None	None	None	None
Polyolefin resin	Trade secret	Trade secret	Not available for the moment	Trade secret	None	None	None	None
Polyester resin	Trade secret	Trade secret	Not available for the moment	Trade secret	None	None	None	None
Silicon copolymerized resin	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

U.N. classification and number : Not applicable

4. First Aid Measures

Eye contact :Rinse thoroughly with running water immediately.  
Then consult an eye specialist.  
Skin contact :Wash off with water and soap.  
Inhalation :Blow nose and gargle.  
Ingestion :Rinse mouth thoroughly with water.  
Then consult a physician.

5. Fire-Fighting Measures

Extinguishing method :Use a large volume of water, extinguishing agent.  
Extinguishing media :A large volume of water, extinguish agent (powder, bubble),  
carbon dioxide.

6. Accidental Release Measures

Collect and recover.

7. Handling and Storage Precautions

Handling :Use in normal temperature, normal humidity and  
non-condensing.  
Storage :Keep away from high temperature, high humidity, fire, water  
leakage, direct sunlight and condensing, store in indoor  
warehouse in normal temperature and normal humidity.

8. Exposure Controls/ Personal Protection

Control parameters

Exposure limit values :

Substance : Titanium dioxide CAS № : 13463-67-7

Country	Limit value-Eight hours		Limit value-Short term	
	ppm	mg/m3	ppm	mg/m3
United Kingdom		10 inhalable aerosol 4 respirable aerosol		
France		11 inhalable aerosol		
Germany				
USA-OSHA		15 total dust		

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. :PET film coated white ink in one side wrapped around center core.

Specific gravity : 0.95  
Boiling point : <200 degree C  
Melting point : 250 to 265 degree C (Melting partly at about 135 degree C)  
Fusibility : Water: Insoluble

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10. Stability and Reactivity

Flash point : >200 degree C  
Ignition quality : No (at normal temperature)  
Oxidation nature : No  
Self-reactive, Explosiveness : No  
Dust explosiveness : No  
Stability , Reactivity : Stable at normal temperature

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11. Toxicological information

Skin Corrosion : No  
Irritation (Eyes, Skin) : No  
Acute toxicity (Including LD50) : No data.  
Carcinogenicity : Titanium oxide IARC group 2B  
(Influence on a human body is not confirmed.)

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12. Ecological information

Degradability: No data  
Accumulative properties: No data  
Fish toxicity: No data

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13. Disposal Considerations

Product should be disposed in accordance with the regulations issued by the appropriate federal, provincial, state and local authorities.

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14. Transport Precautions

Transport careful enough to prevent falling over, drop and cargo collapse.  
Avoid high temperature, high humidity and condensing in transportation.  
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.  
Address : 6925 Tazawa, Toyoshina, Azumino-shi, Nagano-ken  
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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. 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. Do not use for electrical insulation. 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) Cadmium, Hexavalent chromium, mercury (Less than detection limit.) lead (Equal or less than 30ppm) Others are not used.
Chlorinated compounds	:Infinitesimal quantity as bleaching agent in 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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