

# Material Safety Data Sheet (MSDS)

Issue date: Aug. 3, 2011

MSDS#: 11QA011

Revised date: Feb. 15, 2013

rev. 4

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## 1. Product and Company identification

Product name : Red ink ribbon  
Ink ribbon for LC-3WRN9/LC-4WRN9/LC-5WRN9  
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

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.

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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
Titanium dioxide	13463-67-7	236-675-5	Not available for the moment	3	None	None	None	None
Silica SiO <sub>2</sub>	7631-86-9	231-545-4	Not available for the moment	2	None	None	None	None
Coloring Material	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. 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. 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

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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		

Substance : Silica amorphous CAS № : 7631-86-9

Country	Limit value-Eight hours		Limit value-Short term	
	ppm	mg/m3	ppm	mg/m3
United Kingdom		6 inhalable aerosol 2.4 respirable aerosol		
France				
Germany(AGS)		4 inhalable aerosol		
Germany(DFG)		4 inhalable aerosol		
USA-OSHA		80/% silica 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.	: Polyethylene terephthalate film coated on one side thereof with red 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 § 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.
Titanium dioxide 13463-67-7	: 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.  
Address : 6925 Tazawa, Toyoshina, Azumino-shi, Nagano-ken  
399-8285, Japan

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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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## 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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