

Material Safety Data Sheet (MSDS)

Issue date: Aug. 3, 2011

MSDS#: 11QA014

Revised date: April 25, 2013

rev. 5

1. Product and Company identification

Product name : White ink ribbon
Ink ribbon for LC-4BWV9/LC-4TWN9/LC-5TWN9/
LC-5BWV9/ RC-R1WNA
Company : SEIKO EPSON CORP.
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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.

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

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

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.)

12. Ecological information

Degradability: No data

Accumulative properties: No data

Fish toxicity: No data

13. Disposal Considerations

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

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

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.

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.

<Revision history>

Rev.2 Compliant with GHS.

Rev.3 Revise of applicable regulations

Rev.4 Revise composition table

Rev.5 Ink ribbon for RC tape is added.