# Material Safety Data Sheet (MSDS)

Issue date: Aug. 3, 2011

Revised date: Feb. 15, 2013

MSDS#: 11QA0017

rev. 4

1. Product and Company iden	oduct and Company identification					
Product name	: Black ink ribbon D					
	Ink ribbon for LC-2RBP9/LC-3RBP9/LC-4RBP9/					
	LC-5RBP9/LC-6RBP9/LC-7RBP9/LC-6YBP9/					
	LC-7YBP9/LC-4SBM9/LC-4KBM9/LC-2WBN9/					
	LC-3WBN9/LC-4WBN9/LC-5WBN9/LC-6WBN9/					
	LC-7WBN9/LC-2TBN9/LC-3TBN9/LC-4TBN9/					
	LC-5TBN9/LC-6TBN9/LC-7TBN9/LC-3YBW9/					
	LC-4YBW9/LC-5YBW9/LC-3TBW9/LC-4TBW9/					
	LC-5TBW9/LC-3WBW9/LC-4WBW9/LC-5WBW9/					
	LC-6WBC9/LC-7WBC9/LC-4SBE9/LC-5SBE9/					
	LC-6SBE9/LC-5ZBU1/LC-5SBR1					
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 nun	nber : 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	% By	EU	EU	EU	Remark
			No.	Weight	Symbols	R-phrase	OELs	
Carbon black	1333-86-4	215-609-9	Not available for	Trade	None	None	None	None
			the moment	secret				
Ethylene	Trade secret	Trade	Not available for	Trade	None	None	None	None
copolymerized		secret	the moment	secret				
resin								
Polyolefin	Trade secret	Trade	Not available for	Trade	None	None	None	None
resin		secret	the moment	secret				
Polyester	Trade secret	Trade	Not available for	Trade	None	None	None	None
Resin		secret	the moment	secret				
Silicon	Trade secret	Trade	Not available for	Trade	None	None	None	None
copolymerized		secret	the moment	secret				
resin								
Polyethylene	25038-59-9	None	Not available for	Trade	None	None	None	None
terephthalate			the moment	secret				
(PET) film								

U.N. classification and number

: Not applicable

## 4. First Aid Measures

	Eye contact Skin contact Inhalation Ingestion	<ul> <li>:Rinse thoroughly with running water immediately.</li> <li>Then consult an eye specialist.</li> <li>:Wash off with water and soap.</li> <li>:Blow nose and gargle.</li> <li>:Rinse mouth thoroughly with water.</li> <li>Then consult a physician.</li> </ul>
5.	Fire-Fighting Measures Extinguishing method Extinguishing media	:Use a large volume of water, extinguishing agent. :A large volume of water, extinguish agent (powder, bubble), carbon dioxide.
6.	Accidental Release Measures Collect and recover.	
7.	Handling and Storage Precaution	ons
	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 : Carbon black CAS № : 1333-86-4

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

# Exposure controls

	Exposure controls					
	Appropriate engir	neering controls: Not applicable				
	Individual protect	ion measures, such as personal protective equipment:				
	Use per	sonal protection equipment as per Directive 89/686/EEC.				
	Eye/face protection					
	Skin protection					
	Hand protectio	n : Wear protective gloves when required.				
	•					
Other skin protection Respiratory protection		· • ·				
		her information, see section 11 of S.D.S Toxicological				
	informa	-				
	Environmental ex	posure controls: Not applicable in normal conditions of use.				
9. Ph	ysical and Chemical Proper	tion				
J. TH	Physical appearance, col					
	r nyoloar appoarance, con	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. Sta	bility and Reactivity					
	Flash point	:>200 degree C				
	Ignition quality	:No (at normal temperature)				
	Oxidation nature	:No				
	Self-reactive, Explosivene					
	Dust explosiveness	:No				
	Stability, Reactivity	: Stable at normal temperature				
11. To>	kicological information					
11. Tox	kicological information Skin Corrosion	:No				
11. To>	Skin Corrosion	:No :No				
11. To>	Skin Corrosion Irritation(Eyes, Skin)	:No				
11. To>	Skin Corrosion	:No				

12. Ecological information
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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

# Material Safety Data Sheet (MSDS)

Issue date: Aug. 3, 2011

Revised date: Feb. 15, 2013

MSDS#: 11QA006

rev.4

17. Product and Company identification					
Product name	: Metallic receptor tape (Silver, Gold)				
	Receptor tape for LC-4SBM9/LC-4KBM9				
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 num	ber : Giftnotruf Berlin +49(0)30 30686 790				

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

## 19. Composition/Information on Ingredients

	Substance	e/Mixture	:Mi>	kture						
Composition	Materia Silver	al name Gold	CAS No.	EEC No.	EU registration No.	% By Weight	EU Symbols	EU R-phrase	EU OELs	Remark
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
Color layer		Acrylic series ink	Trade secret	Trade secret	Not available for the moment	Trade secret	None	None	None	None
Evaporated layer	Alum	iinum	7429-90-5	231-072-3	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
Adhesive	Acrylic adhesive agent		Trade secret	Trade secret	Not available for the moment	Trade secret	None	None	None	None
Liner paper	Siliconized po	lyethylene film	Trade secret	Trade secret	Not available for the moment	Trade secret	None	None	None	None
Core	Alkyl benzene sulfonate (ABS)		9003-56-9	Trade secret	Not available for the moment	Trade secret	None	None	None	None

UN classification/UN number

: Not applicable

20. First A	vid Measures						
E	Eye contact	If there	thoroughly with clean water. re is foreign material in eyes or wound or pain consul re specialist.				
	Skin contact ngestion	ion or other aberrance happens, consult a physician. e vomiting if possible. If aberrance happens, consult a ian.					
21. Fire-F	ighting Measures						
	Extinguishing method Extinguishing media	:Use same method as normal fire. :A large volume of water, extinguish agent (powder, bubbl carbon dioxide.					
22. Accide	ental Release Measures						
Ν	Not necessary.						
23. Handl	ing and Storage Precautio	ons					
Handling : This tap Do not Wipe			e is for printing. use for electrical insulation. off oil or water on the surface where this tape is stuck sticking.				
5	Storage	:Keep a	away from direct sunlight and store in cool place.				
24. Expos	sure Controls/ Personal Pr	otection					
	Control limit		plicable.				
	Occupational exposure lin		: Not applicable.				
	Facility and equipment me Protective equipment:	easures	: Not required.				
	- Respiratory equ	inment <sup>.</sup>	Not required.				
	- Safety goggles:	ipinioni.	Not required.				
	- Protective glove	s.	Not required.				
	- Protective suit:	0.	Not required.				
DE Dhuaid							
•	cal and Chemical Propertion Physical appearance, colo		: Roll adhesive tape with paper liner, wrapped				
Г	Tiysical appearance, colo	1, 610.	around center core.				
c	Specific gravity	·No data	a (1.4 as polyethylene terephthalate)				
	Aelting point		a (255 degree C as polyethylene terephthalate)				
	lash point	:No data					
	gnition temperature Fusibility	:508 deg	gree C Insoluble				
1							

## 26. Stability and Reactivity

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

27. Toxicological information

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

#### 28. Ecological information

Ozone depleting substance Specific brominated flame retarda	:Not used Ints :Not used
Hormone disrupting chemicals	:Not used
Harmful heavy metal	:Cadmium, Hexavalent chromium, mercury (Less than detection limit.)
	lead (Equal or less than 30ppm)
Chlorinated compounds	:Not used
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.

29. Disposal Considerations

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

#### 30. Transport Precautions

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

#### 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.			

#### 32. Disclaimer

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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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