Material Safety Data Sheet (MSDS)

 Issue date: Aug. 3, 2011
 MSDS#: 11QA0010

 Revised date: Feb. 15, 2013
 rev. 4

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		

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.

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	8	None	None	None	None
			the moment					
Coloring	Trade secret	Trade	Not available for	Trade	None	None	None	None
Material		secret	the moment	secret				
Wax	Trade secret	Trade	Not available for	Trade	None	None	None	None
		secret	the moment	secret				
Resin	Trade secret	Trade	Not available for	Trade	None	None	None	None
		secret	the moment	secret				
Additive agent	Trade secret	Trade	Not available for	Trade	None	None	None	None
		secret	the moment	secret				
Polyethylene	25038-59-9	None	Not available for	Trade	None	None	None	None
terephthalate			the moment	secret				
(PET) film								

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.

5. F	ire-Fighting Measures		
	Extinguishing media	: Water mist, Foam, Dry	powder, CO2 gas, other
	Unsuitable extinguishing media	: Not applicable	
	Special hazards arising from the su	bstance or mixture	: No information
	Advice for firefighters	: No special measures re	equired.

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

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

	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

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 inform	ation, see section 11 of S.D.S Toxicological			
information.				
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Environmental exposure controls: Not applicable in normal conditions of use.

9.	Phy	sical and Chemical Properties	
	Physical appearance, color, etc.		: Polyethylene terephthalate film coated on one side thereof with black ink wrapped around center core.
		рН	: 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	e 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

10. Stability and Reactivity

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 hazard	ous reactions: No hazardous reaction when handled and stored	
	according to provisions.	
Conditions to avoid	:High temperature、High humidity、direct sunlight	
Incompatible materia	als: None	
Hazardous decompo	osition products: No dangerous decomposition products occur under	
	normal storage and use conditions.	

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

12. Ecological information

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Toxicity	: No data is available
Persistence and degradabil	lity: No data is available
Bioaccumulative potential	: No data is available
Mobility in soil	: No data is available
Results of PBT and vPvB a	ssessment : No data is available
Other adverse effects	: No data is available

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.

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 use	r : No special
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.

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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.

<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#:11QA004

rev.4

17. Product and Company ic			
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		
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		
18. Hazards Identification			
GHS Classification			
This produ	ict is not classed as hazardous to health by directive 1999/45/EC		
GHS Label Element	s Including Precautionary Statements : Not applicable		
Hazard Statement	:None		
Toxicological inform	nation :None		
Ecological Informat			

19. Composition/Information on Ingredients

Substance/Mixture :Mixture

	Material name										
Composition	Transparent/ Colored	Transparent	Colored	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
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

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 Ingestion	 :If irritation or other aberrance happens, consult a physician. : Induce vomiting if possible. If aberrance happens, consult a physician.
21. Fire-Fighting Measures	
Extinguishing method Extinguishing media	:Use same method as normal fire. :A large volume of water, extinguish agent (powder, bubble),
	carbon dioxide.
22. Accidental Release Meas	ures
Not necessary.	
23. Handling and Storage Pre	cautions
Handling	: This tape is for printing.
	Do not use for electrical insulation.
	Wipe off oil or water on the surface where this tape is stuch before sticking.
Storage	:Keep away from direct sunlight and store in cool place.

24. Exposure Controls/ Personal Protection

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

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 Melting point Flash point Ignition temperature Fusibility	:No data (1.4 as polyethylene terephthalate) :No data (255 degree C as polyethylene terephthalate) :290 degree C :442 degree C :Water: Insoluble		
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

Irritating nature Sensitization Mutagenicity Acute toxicity	:No :No data :No data :No data	
Acule loxicity	.NU Udla	

28. Ecological information

Ozone depleting substance Specific brominated flame retarda	:Not used ants :Not used
Hormone disrupting chemicals	:Not used
Harmful heavy metal	
Hamilui neavy metai	: 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
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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	:Nothing		
Incineration	Nothing (Incinerate 800 degree C or above.)		
30. Transport Precautions			
Nothing. Transport as general tran Transport careful enough to preve UN classification/UN number	nt 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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