Material Safety Data Sheet (MSDS)

Issue date: Aug. 3, 2011 MSDS#:11QA012 Revised date: Feb. 15, 2013 rev. 4

1.	Product and Company identifi	cation
	Product name	: Blue ink ribbon
		Ink ribbon for LC-4WLN9
	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 numb	er : 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	
Copper	Trade secret	Trade	Not available for	5	None	None	None	None
compounds		secret	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	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. 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.

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 : Not applicable

Exposure controls

Appropriate engineering controls: Not applicable

Individual protection measures, such as personal protective equipment:

Use personal pro	tection 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 co	ontrols: Not applicable in normal conditions of use.				

9. Physical and Chemical Properties

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	Physical appearance, color, etc.	: Polyethylene terephthalate film coated on one side
		thereof with red 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	: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 hazard	ous reactions: No hazardous reaction when handled and stored according to provisions.
Conditions to avoid	:High temperature、High humidity、direct sunlight
Incompatible materi	als: None
Hazardous decompo	osition products: No dangerous decomposition products occur under
	pormal storage and use conditions
	normal storage and use conditions.
11. Toxicological information	
11. Toxicological information Acute toxicity	
U	
Acute toxicity	: No data is available regarding the product itself.
Acute toxicity Irritation	: No data is available regarding the product itself. : No data is available regarding the product itself.
Acute toxicity Irritation Corrosivity	: No data is available regarding the product itself. : No data is available regarding the product itself. : No data is available regarding the product itself. : No data is available regarding the product itself.

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No data is available regarding the product itself.
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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 user	: 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/legislati	on 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#:11QA004

rev.4

17 Product of	nd Company identific	ation
	uct name	
PIOU	uciname	: 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/
Com	2021	LC-5WBW9/LC-6WBC9/LC-7WBC9/LC-5BWV9 : SEIKO EPSON CORP.
Com Addr	•	
Addi	288	: 6925 Tazawa, Toyoshina, Azumino-shi, Nagano-ken
Tolor	hone No.	399-8285, Japan : 0263-87-5814
Fax.		: 0263-87-5813
	nil address	: takizawa.mitsunori@exc.epson.co.jp
-		er : Giftnotruf Berlin +49(0)30 30686 790
18. Hazards lo		Si Chitholi di Denini +49(0)30 30080 790
GHS	Classification	
	This product is no	ot classed as hazardous to health by directive 1999/45/EC
GHS	Label Elements Includ	ding Precautionary Statements : Not applicable
Haza	rd Statement	:None
Toxic	ological information	:None
Ecolo	gical Information	:None

19. Composition/Information on Ingredients

Substance/Mixture :Mixture

		Material name	}			24 D	EU	E 11			
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	:Use same method as normal fire.
Extinguishing media	:A large volume of water, extinguish agent (powder, bubble), carbon dioxide.
22. Accidental Release Meas	ures
Not necessary.	
23. Handling and Storage Pre	ecautions
Handling	: This tape is for printing.
	Do not use for electrical insulation.
	Wipe off oil or water on the surface where this tape is stucl 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, o	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

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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 retardar	:Not used nts :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
	Page:8of9

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 trai	nsported material.			
Transport careful enough to preve	ent 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			
31. Applicable regulations				
Safety, health and environmental re	egulations/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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