# Safety Data Sheet (SDS)

Issue date: Dec. 3, 2015

Revised date: Jan. 28, 2016

4 14							
1. Id	Product identifier	<pre>/mixture and of the company/undertaking : Heat shrink tube receptor tape (SUMITUBE) Receptor tape for LK-4WBA5/LK-4YBA5/LK-6WBA11/ LK-6WBA14/LK-6YBA11/LK-6YBA14/LK-7WBA21/</pre>					
	LK-7YBA21 Details of the supplier of the safety data sheet						
	Distributor : EPSON EUROPE B.V.						
	Address	: Azie building, Atlas ArenA, Hoogoorddreef 5,1101 BA Amsterdam Zuidoost The Netherlands					
	Telephone No.	<u>www.epson-europe.com</u> : +31-20-314-5000					
	Fax. No.	: +31-20-314-5100					
		: chemicals@epson-europe.com					
	Emergency telephone numb						
2. H	azards Identification						
	GHS Classification	:Not applicable					
	GHS Label Elements Includ	ling Precautionary Statements :Not applicable					
	Hazard Statement	:None					
	Toxicological information	: If the product is overheated or burned, harmful					
		vapors may be formed.					
		The heated product has the potential to cause					
		thermal burns, if touched.					
	Ecological Information	:None					
3. C	omposition/Information on Ing	redients					
	Substance/Mixture	:Mixture					
	General product description	:Irradiated cross-linked, flexible, flame-retardant,					
		heat-shrinkable, polyolefin tubing					
	Ingredient	:Electron beam cross-linking polyolefin series compounder					
4 5							
4. FI	irst Aid Measures						
	Inhalation	: If vapors from the burning or overheated product are inhaled, provide fresh air. If symptoms are not reduced, seek medical advice.					
	Skin contact	: If the heated product contacts skin, remove the product immediately. If there is evidence of reddening or burn, seek medical advice.					
	Eye contact	: If the heated product contacts eyes, rinse thoroughly wit plenty of water for at least 15 minutes and seek medical advice.					
	Ingestion	:Seek medical advice.					

MSDS#:15QA060

rev. 2

### 5. Fire-Fighting Measures

0.	r no r ignang measures	
	Extinguishing media	: A large volume of water, extinguish agent (powder, bubble), carbon dioxide.
	Unsuitable extinguishing me	edia : No information
	Special hazards arising fror	n the substance or mixture : No information
	Advice for firefighters	: The self-contained breathing apparatus and the personal protective equipment may be needed in the event of large fires.
6.	Accidental Release Measures	
	Personal precautions	: Avoid contact with the heated product. Gloves may be required to handle the product, when hot. If overheated, avoid breathing fumes which may be emitted.
	Environmental precaution	: In common with all good industrial practice, install in well ventilated areas only.
	Methods for cleaning up	: Sweep up and dump in a disposal container.
	Methods for cleaning up	

## 7. Handling and Storage Precautions

Handling Storage	<ul> <li>No special handling advice required.</li> <li>Store at room temperature in unopened packs to avoid direct sunlight.</li> </ul>
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8.	Exposure Controls/	Personal Protection
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Control limit : Not ap	plicable.
Occupational exposure limits	: Not applicable.
Facility and equipment measures	: Not required.
Protective equipment:	
<ul> <li>Respiratory equipment:</li> </ul>	Not required under normal operation.
<ul> <li>Safety goggles:</li> </ul>	Not required under normal operation.
- Protective gloves:	Gloves may be required to handle the product, when hot.
- Protective suit:	Not required under normal operation.

# 9. Physical and Chemical Properties

Physical appearance Color Odor	: Solid(Tubing) : Yellow and White
Melting point	: Slight characteristic plastic odor : The material has melting point, 90 °C nominal, but it will
Mening point	not flow over the melting temperature due to the cross-linked structure.
Boiling point	: Not applicable.
Flash point	: Unknown
Ignition temperature	: Unknown
Explosive properties	: Not applicable
Vapor pressure	: Not applicable
Specific gravity	: 1.35 nominal
Fusibility	: Small molecular solubility in water

10.	Stability	and	Reactivity
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i IC		regulations. Contact proper local authorities. : Cardboard boxes and reels can be delivered to local
-	l Considerations	: Incinerate or bury in accordance with local and national
Fu	rther information	: No data
	accumulative properties	
	, a e gi a a a a a i i i j	: No data
•	cal information	: No data
		may cause discomfort for susceptible persons.
	0	: No data : During heating process of the product, slight plastic smell
		: No data
	5	: No data
-		cause irritation to the upper respiratory tract. Not digestible.
Inh	alation	: Harmful vapors produced by overheating or burning may
Eye	es	: If the product is overheated or burned, vapors may irritate eyes.
Ski	in	: Not irritating, but the heated product has potential to cause thermal burn.
Ac	ute toxicity	: No data
11. Toxicolo	gical information	
		None Products : None under normal conditions. If the product is overheated or burned, harmful vapors(e.g. carbon monoxide and hydrogen halides) may be generated.
	ability	operating temperature is 125 °C. Do not heat over 300 °C to avoid harmful vapors which may be formed at high temperatures.

Not classified as dangerous with regard to the transport regulation.

#### 15. Applicable regulations

Poisonous and Deleterious Substances Control Law : N/A

#### 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 Revise of the supplier of the safety data sheet

# Safety Data Sheet (SDS)

Issue date: Dec. 03, 20015

Revised date: Jan. 28, 2016

MSDS#:15QA065

rev. 2

	ubstance/mixture and of the					
Product identifier		: Black ink ribbon F for HST Ink ribbon for LK-4WBA3/LK-4WBA5/LK-4YBA3/LK-4YBA5/				
		(-6WBA14/LK-6YBA11/LK-6YBA14/				
	LK-7WBA21/LK					
Details of the supplier of the safety data sheet						
-	Distributor : EPSON EUROPE B.V.					
Addres		Atlas ArenA, Hoogoorddreef				
	5,1101 BA Amsterdam Zuidoost The Netherlands <u>www.epson-europe.com</u> Telephone No. : +31-20-314-5000					
•						
Fax. No						
		son-europe.com				
Emergency telep	bhone number : Giftho	otruf Berlin +49 (0) 30 30686790				
18. Hazards Identification	n					
2.1. Classification of the	ne substance or mixture					
Physical hazard	:Explosives	Classification not possible				
	Flammable gases	Not Applicable				
	Flammable aerosols	Not Applicable				
	Oxidizing gases	Not Applicable				
	Gases under pressure	Not Applicable				
	Flammable liquids	Not Applicable				
	Flammable solids	Classification not possible				
	Self-reactive substances	and mixtures Classification not possible				
	Pyrophoric liquids	Not Applicable				
	Pyrophoric solids	Not Classified				
	Self-heating substances	· · · · · ·				
	Substances and mixture					
		mit flammable gases Not Classified				
	Oxidizing liquids	Not Applicable				
	Oxidizing solids	Classification not possible				
	Organic peroxides	Classification not possible				
	Corrosive to metals	Classification not possible				
Health hazard	:Acute toxicity(Oral)	Classification not possible				
	Acute toxicity(Dermal)	Classification not possible				
	Acute toxicity(Gases)	Not Applicable				
	Acute toxicity(Vapors)	Classification not possible				
	Acute toxicity(Dusts)	Classification not possible				
	Acute toxicity(Mists)	Classification not possible				
	Skin corrosion/irritation	Classification not possible				
	Serious eye damage/eye	•				
	Respiratory sensitization	Classification not possible				
	Skin sensitization	Classification not possible				
	Germ cell mutagenicity	Classification not possible				
	Carcinogenicity	Class2				
	Reproductive toxicity	Classification not possible				

	Specific target organ toxic (single exposure) Specific target organ toxic (repeated exposure) Aspiration hazard		
Environmental h	azard :Hazardous to the aquatic (Acute)	environment	Classification not possible
2.2. Label Elements	Hazardous to the aquatic (Chronic)	environment	Classification not possible
Signal word Hazard statemer	: Danger hts: Possibly carcinogenic to Long term or repeatedly o		damage to respiratory.
Safety advise	: Store in cool dark place Wear protective gloves if Avoid inhalation of dust o	necessary.	

## 19. Composition/Information on Ingredients

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	11	None	None	None	None
			the moment					
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								

General product description : Ink ribbon

#### 20. 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 Inhalation	:Wash off with a large volume of water and soap. : 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.

#### 21. Fire-Fighting Measures

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Extinguishing media	: Water mist, Foam, Dry po	wder, CO2 gas, other
Unsuitable extinguishing media	: Not applicable	
Special hazards arising from the subs	stance or mixture	: No information
Advice for firefighters	: No special measures requ	iired.

#### 22. 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

#### 23. 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

#### 24. Exposure Controls/ Personal Protection

#### Control parameters

Exposure limit values : As carbon black

#### Substance : Carbon black CAS № : 1333-86-4

	Limit value-Eight hours		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	

:Not applicable as product

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.			

Environmental exposure controls: Not applicable in normal conditions of use.

25. Physical and Chemical Properties	
Physical appearance, color, etc.	: Polyethylene terephthalate film coated on one side thereof with black ink wrapped around center core.
рН	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Flash point	: >150°C
Upper/lower flammability or explosive	e limits: No data available
Vapor pressure	: No data available
Vapor density	: No data available
Specific gravity	: 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

Evaporation rate	: Not applicable
Flammability (solid, gas)	: This product is not classed as flammable.
Viscosity	: No data available

## 26. 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 section 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.	

27. Toxicological information	
Acute toxicity	: No data is available regarding the product itself.
Skin corrosion/irritation	: No data is available regarding the product itself.
Serious eye damage/irrita	ation : No data is available regarding the product itself.
Sensitization	: No data is available regarding the product itself.
Germ cell mutagenicity	: No data is available regarding the product itself.
Carcinogenicity	: Class2(Carbon black is categorized as class2 and content amount of that is more than 10%)
Specific target organ toxic (single exposure)	city : No data is available regarding the product itself.
Specific target organ toxic (repeated exposure)	content amount of that is more than 10%)
Aspiration hazard	: No data is available regarding the product itself.

# 28. 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

#### 29. 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.

#### 30. Transport Precautions

UN number	: Not applicable	
UN proper shipping name	e : Not applicable	
Transport hazard class(es	s) : Not applicable	
Packing group	: Not applicable	
Environmental hazards	: Not applicable	
Special precautions for us	ser : No special	
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 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.

#### 32. Disclaimer

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<Revision history> Rev.2 Revise of the supplier of the safety data sheet