Safety Data Sheet (SDS)

Issue date: Dec. 3, 2015 MSDS#:15QA060

Revised date: Jan. 28, 2016 rev. 2

1. Identification of the substance/mixture and of the company/undertaking

Product identifier : Heat shrink tube receptor tape (SUMITUBE)

Receptor tape for LK-4WBA5/LK-4YBA5/LK-6WBA11/LK-6WBA14/LK-6YBA11/LK-6YBA14/LK-7WBA21/

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

www.epson-europe.com

Telephone No. : +31-20-314-5000 Fax. No. : +31-20-314-5100

E-mail address : chemicals@epson-europe.com

Emergency telephone number : Giftnotruf Berlin +49 (0) 30 30686790

2. Hazards Identification

GHS Classification :Not applicable

GHS Label Elements Including 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. Composition/Information on Ingredients

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. First 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 with

plenty of water for at least 15 minutes and seek medical

advice.

Ingestion :Seek medical advice.

5. Fire-Fighting Measures

Extinguishing media : A large volume of water, extinguish agent (powder, bubble),

carbon dioxide.

Unsuitable extinguishing media : No information

Special hazards arising from 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.

7. Handling and Storage Precautions

Handling : No special handling advice required.

Storage : Store at room temperature in unopened packs to avoid

direct sunlight.

8. Exposure Controls/ Personal Protection

Control limit : Not applicable.

Occupational exposure limits : Not applicable. Facility and equipment measures : Not required.

Protective equipment:

Respiratory equipment: Not required under normal operation.Safety goggles: 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 : Solid(Tubing)
Color : Yellow and White

Odor : Slight characteristic plastic odor

Melting point : The material has melting point, 90 °C nominal, but it will

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

Stability : Stable at normal conditions. Recommended max.

operating temperature is 125 °C. Do not heat over 300 °C

to avoid harmful vapors which may be formed at high

temperatures.

Material to avoid : None

Hazardous decomposition products: None under normal conditions. If the product is

overheated or burned, harmful vapors(e.g. carbon monoxide and hydrogen halides) may be generated.

11. Toxicological information

Acute toxicity : No data

Skin : Not irritating, but the heated product has potential to cause

thermal burn.

Eyes : If the product is overheated or burned, vapors may irritate

eyes.

Inhalation : Harmful vapors produced by overheating or burning may

cause irritation to the upper respiratory tract.

Ingestion : Not digestible.

Chronic toxicity : No data Carcinogenicity : No data Mutagenicity : No data

Further information : During heating process of the product, slight plastic smell

may cause discomfort for susceptible persons.

12. Ecological information

Biodegradability : No data Fish toxicity : No data

Bioaccumulative properties : No data

Further information : No data

13. Disposal Considerations

Product : Incinerate or bury in accordance with local and national

regulations. Contact proper local authorities.

Contaminated packaging : Cardboard boxes and reels can be delivered to local

recycling facilities.

14. Transport Precautions

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 MSDS#:15QA065

Revised date: Jan. 28, 2016 rev. 2

17. Identification of the substance/mixture and of the company/undertaking

Product identifier : Black ink ribbon F for HST

Ink ribbon for LK-4WBA3/LK-4WBA5/LK-4YBA3/LK-4YBA5/

LK-6WBA11/LK-6WBA14/LK-6YBA11/LK-6YBA14/

LK-7WBA21/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

www.epson-europe.com

Telephone No. : +31-20-314-5000 Fax. No. : +31-20-314-5100

E-mail address : chemicals@epson-europe.com

Emergency telephone number : Giftnotruf Berlin +49 (0) 30 30686790

18. Hazards Identification

Health hazard

2.1. Classification of the substance or mixture

Physical hazard :Explosives Classification not possible

Flammable gases
Flammable aerosols
Oxidizing gases
Gases under pressure
Flammable liquids
Not Applicable
Not Applicable
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 and mixtures Classification not possible

Substances and mixtures which,

in contact with water, emit flammable gases Not Classified

Oxidizing liquids Not Applicable

Oxidizing solids
Organic peroxides
Corrosive to metals
:Acute toxicity(Oral)
Acute toxicity(Dermal)

Classification not possible
Classification not possible
Classification not possible
Classification not possible

Acute toxicity(Gases) Not Applicable

Acute toxicity(Vapors)

Acute toxicity(Dusts)

Acute toxicity(Mists)

Classification not possible
Classification not possible
Classification not possible
Classification not possible

Serious eye damage/eye-irritation Classification not possible

Respiratory sensitization Classification not possible Classification not possible Classification not possible Classification not possible Classification not possible

Carcinogenicity Class2

Reproductive toxicity Classification not possible

Specific target organ toxicity

Classification not possible

(single exposure)

Specific target organ toxicity

Class1(Lung)

(repeated exposure)

Aspiration hazard Classification not possible

Environmental hazard

:Hazardous to the aquatic environment

Classification not possible

(Acute)

Hazardous to the aquatic environment

Classification not possible

(Chronic)

2.2. Label Elements



Signal word : Danger

Hazard statements: Possibly carcinogenic to humans.

Long term or repeatedly exposure may add damage to respiratory.

Safety advise : Store in cool dark place

Wear protective gloves if necessary. Avoid inhalation of dust of ink.

19. 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	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								

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 :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.

21. 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.

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

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 :Not applicable as product

Exposure limit values : As carbon black

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 information, 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.

pH : 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 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

Page:8of10

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/irritation : 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 toxicity: No data is available regarding the product itself.

(single exposure)

Specific target organ toxicity : Class1(Carbon black is categorized as class1 and

(repeated exposure) content amount of that is more than 10%)
Aspiration hazard : No data is available regarding the product itself.

28. Ecological information

Toxicity : No data is available
Persistence and degradability: No data is available
Bioaccumulative potential : No data is available
Mobility in soil : No data is available

Results of PBT and vPvB assessment : 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 : 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

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

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