

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 Zuidooost 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

2.1. Classification of the 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 and mixtures	Classification not possible
	Substances and mixtures which, in contact with water, emit 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-irritation	Classification not possible
	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 toxicity (single exposure) Classification not possible
 Specific target organ toxicity (repeated exposure) Class1(Lung)
 Aspiration hazard Classification not possible

Environmental hazard

:Hazardous to the aquatic environment (Acute) Classification not possible
 Hazardous to the aquatic environment (Chronic) Classification not possible

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 No.	% By Weight	EU Symbols	EU R-phrase	EU OELs	Remark
Carbon black	1333-86-4	215-609-9	Not available for the moment	11	None	None	None	None
Wax	Trade secret	Trade secret	Not available for the moment	Trade secret	None	None	None	None
Resin	Trade secret	Trade secret	Not available for the moment	Trade secret	None	None	None	None
Additive agent	Trade secret	Trade secret	Not available for the moment	Trade secret	None	None	None	None
Polyethylene terephthalate (PET) film	25038-59-9	None	Not available for the moment	Trade secret	None	None	None	None

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 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 :Not applicable as product

Exposure limit values : As carbon black

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

Country	Limit value-Eight hours		Limit value-Short term	
	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

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 (single exposure) : No data is available regarding the product itself.
Specific target organ toxicity (repeated exposure) : Class1(Carbon black is categorized as class1 and 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