Safety Data Sheet (SDS)

Issue date: Dec. 17, 2015 MSDS#:15QA068

Revised date: Jan. 28, 2016 rev. 2

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

Product identifier : Metallic receptor tape (Silver, Gold)

Receptor tape for LK-4SBM/LK-4KBM

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

This product is not classed as hazardous to health by directive 1999/45/EC GHS Label Elements Including Precautionary Statements : Not applicable

Hazard Statement :None Toxicological information :None Ecological Information :None

3. Composition/Information on Ingredients

Substance/Mixture :Mixture

| | Materia | l name | | | EU | % By | EU | EU | EU | |
|------------------|---------------------------------------------|-----------------------|-----------------|-----------------|------------------------------|-----------------|---------|----------|------|--------|
| Composition | Silver | Gold | CAS No. | EEC No. | registration No. | Weight | Symbols | R-phrase | 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 |
| Color layer | | Acrylic series ink | Trade secret | Trade secret | Not available for the moment | Trade secret | None | None | None | None |
| Evaporated layer | Aluminum | | 7429-90-5 | 231-072-3 | 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 |
| 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 | Acrylonitrile - butadiene - styrene(ABS) | | 9003-56-9 | Trade secret | Not available for the moment | Trade secret | None | None | None | None |

UN classification/UN number : Not applicable

4. 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.

5. Fire-Fighting Measures

Extinguishing method : Use same method as normal fire.

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

carbon dioxide.

6. Accidental Release Measures

Not necessary.

7. Handling and Storage Precautions

Handling : This tape is for printing.

Do not use for electrical insulation.

Wipe off oil or water on the surface where this tape is stuck

before sticking.

Storage :Keep away from direct sunlight and store in cool place.

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.
Safety goggles: Not required.
Protective gloves: Not required.
Protective suit: Not required.

9. Physical and Chemical Properties

Physical appearance, color, etc. : Roll adhesive tape with paper liner, wrapped

around center core.

Specific gravity :No data (1.4 as polyethylene terephthalate)

Melting point :No data (255 degree C as polyethylene terephthalate)

Flash point :No data
Ignition temperature :508 degree C

Fusibility :Water: Insoluble

10. Stability and Reactivity

Combustibility :Yes (It will burn, if there is a source of ignition.)

Inflammability :No
Explosiveness :No
Reactivity :No
Stability :Stable

11. Toxicological information

Irritating nature :No
Sensitization :No data
Mutagenicity :No data
Acute toxicity :No data

12. Ecological information

Ozone depleting substance :Not used

Specific brominated flame retardants :Not used

Hormone disrupting chemicals :Not used

Harmful heavy metal :Cadmium, Hexavalent chromium, mercury

(Less than detection limit.) lead (Equal or less than 30ppm)

Chlorinated compounds :Not used
Degradability :No data
Accumulative properties :No data
Fish toxicity :No data

Disposal prohibition :Do not dispose on the ocean, waterside and

outdoors to prevent a marine organism and birds

from taking it in.

13. Disposal Considerations

Disposal :Nothing

Incineration :Nothing (Incinerate 800 degree C or above.)

14. Transport Precautions

Nothing. Transport as general transported material.

Transport careful enough to prevent falling over, drop and cargo collapse.

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 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.

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. 3, 2015 MSDS#:15QA064

Revised date: Jan. 28, 2016 rev. 2

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

Product identifier : Black ink ribbon D

Ink ribbon for LK-1WBN/LK-1YBP/LK-1TBN/LK-2RBP/LK-2WBN/LK-3RBP/LK-3YBW/LK-3TBW/LK-3WBW/LK-4KBK/LK-4RBP/LK-4YBW/LK-4TBW/LK-4WBW/LK-4SBE/LK-4SBM/LK-4KBM/LK-4WBN/LK-4ZBKA/LK-5WB2/LK-5RBP/LK-5YBW/LK-5TBW/LK-5WBW/LK-5TBW/LK-5WBW/LK-5TBW/LK-5WBW/LK-5TBW/LK-5WBW/LK-5TBW/LK-5WBW/LK-5TBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WBW/LK-5WB

LK-5SBE/LK-5ZBU/LK-5SBR/LK-5YB2/LK-5RB2/LK-5LB2/

LK-5GB2/LK-6WB2/LK-6RBP/LK-6YBP/LK-6WBN/

LK-6TBN/LK-6SBE/LK-6YB2/LK-6RB2/LK-6LB2/LK-6GB2/LK-7WB2/LK-7RBP/LK-7YBP/LK-7WBN/LK-7TBN/LK-7YB2/

LK-6WBC/LK-7WBC

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

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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

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.

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 | Trade | None | None | None | None |
| | | | the moment | secret | | | | |
| Ethylene | Trade secret | Trade | Not available for | Trade | None | None | None | None |
| copolymerized | | secret | the moment | secret | | | | |
| resin | | | | | | | | |
| Polyolefin | Trade secret | Trade | Not available for | Trade | None | None | None | None |
| resin | | secret | the moment | secret | | | | |
| Polyester | Trade secret | Trade | Not available for | Trade | None | None | None | None |
| Resin | | secret | the moment | secret | | | | |
| Silicon | Trade secret | Trade | Not available for | Trade | None | None | None | None |
| copolymerized | | secret | the moment | secret | | | | |
| resin | | | | | | | | |
| Polyethylene | 25038-59-9 | None | Not available for | Trade | None | None | None | None |
| terephthalate | | | the moment | secret | | | | |
| (PET) film | | | | | | | | |

U.N. classification and number : Not applicable

20. First Aid Measures

Eye contact :Rinse thoroughly with running water immediately.

Then consult an eye specialist.

Skin contact :Wash off with water and soap.

Inhalation :Blow nose and gargle.

Ingestion :Rinse mouth thoroughly with water.

Then consult a physician.

21. Fire-Fighting Measures

Extinguishing method :Use a large volume of water, extinguishing agent.

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

carbon dioxide.

22. Accidental Release Measures

Collect and recover.

23. Handling and Storage Precautions

Handling :Use in normal temperature, normal humidity and

non-condensing.

Storage :Keep away from high temperature, high humidity, fire, water

leakage, direct sunlight and condensing, store in indoor warehouse in normal temperature and normal humidity.

24. 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 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. :PET film coated black ink in one side wrapped

around center core.

Specific gravity :0.95

Boiling point : <200 degree C

Melting point :250 to 265 degree C (Melting partly at about 135 degree C)

Fusibility :Water: Insoluble

26. Stability and Reactivity

Flash point :>200 degree C

Ignition quality :No (at normal temperature)

Oxidation nature :No

Self-reactive, Explosiveness :No

Dust explosiveness :No

Stability, Reactivity: Stable at normal temperature

27. Toxicological information

Skin Corrosion :No Irritation(Eyes, Skin) :No

Acute toxicity(Including LD50) :No data.

Carcinogenicity :Carbon black IARC group 2B

(Influence on a human body is not confirmed.)

28. Ecological information

Degradability: No data
Accumulative properties: No data
Fish toxicity: No data

29. Disposal Considerations

Product should be disposed in accordance with the regulations issued by the appropriate federal, provincial, state and local authorities.

30. Transport Precautions

Transport careful enough to prevent falling over, drop and cargo collapse. Avoid high temperature, high humidity and condensing in transportation. 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