

Copper Tape Material Safety Data Sheet**1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY**

- 1.1. Product Name: ACFB50U18, ACFB100U18, ACFB50U20, ACFB100U20, ACFB50U10.
- 1.2. Use: Soft Copper foil/Polyester laminated for use as induction loop cable.
- 1.3. Address: Ampetronic Ltd., Unit 2, Trentside Business Village,
Farndon Road, Newark, NG24 4XB
01636 610062
sales@ampetronic.co

1.6. Health & Safety Information:

2. HAZARD IDENTIFICATION Not Hazardous.

3. COMPOSITION & INFORMATION ON INGREDIENTS

- 3.1. Chemical characterization:
Polyester Film (CAS Nr. 25038-59-9).
Copper Foil (CAS No. 7440-50-8 copper) (EINECS Nr. 231-159-6)
Polyacrylate Adhesive (CAS Nr. 25134-51-4)

3.2. HAZARDOUS INGREDIENTS¹

Name: No hazardous materials present.

¹ According to Commission Directive 1999/45/EC.

4. FIRST AID MEASURES

- 4.1. Skin: No irritation is expected from handling the tape however ensure good industrial hygiene and wash exposed areas with soap and water.
- 4.2. Eyes: Rinse opened eyes for several minutes under running water. Treat symptomatically
- 4.3. Inhalation: Not a probable route of exposure for adhesive tape.

Copper Tape Material Safety Data Sheet

4.4. Ingestion: Not a probable route of exposure for adhesive tape.
Treat symptomatically.

4.5. Other first aid information: Not known.

5. FIRE EXTINGUISHING MEASURES

5.1. Extinguishing media: Carbon dioxide, foam, dry powder, or fine water spray.

5.2. Unsuitable extinguishing media: None known.

5.3. Unusual firefighting hazards: None known

5.4. Special firefighting procedures: Self-contained respirator should be worn.

5.5. Other recommendations: None known.

5.6. Combustion products:

Copper is stable up to its melting point. No dangerous decomposition products known. Complete combustion of polyester film gives carbon dioxide and water. Incomplete combustion gives in addition carbon monoxide, organic acids, aldehydes and alcohols. Complete combustion of polyacrylate adhesive will give carbon dioxide, carbon monoxide and water. These combustion products, like those of other of other natural and synthetic materials must be considered toxic.

6. ACCIDENTAL RELEASE MEASURE

6.1. Personal protection: Avoid contact with eyes.

6.2. Precautions to protect the environment: As this is a solid material then spills and releases are not a factor however dust should be swept up or vacuumed to reduce airborne dust and particulates.

6.3. Cleanup procedure: Pick up to prevent floor hazard

7. HANDLING AND STORAGE

7.1. Handling precautions: Avoid contact with eyes.

Copper Tape Material Safety Data Sheet

7.1.1 Metal foil tapes may have sharp edges therefore wear protective gloves.
Ensure good in hygiene and wash skin with soap and water after contact.

7.1.2 Due to the malleability of metal foils, care must be taken to avoid scratching or deforming of the foil during handling. We specifically recommend where possible, that the roll be handled and lifted by it's core.

7.1.3 Due to the high density of metal foils, some of these rolls can be classified as being heavy (i.e. greater that 5.0 Kg / 11.1 lbs in weight) / It is therefore recommended that added care be must be taken during manual lifting.

7.1.4 Avoid exposure to contaminants such as oil, dust or dirt.

7.2. Storage: No special measures are required.

7.3. Unsuitable packaging materials: None known.

7.4. Incompatibilities: None known.

7.5. Other information: None known.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Exposure controls: No special requirements.

8.2. Exposure controls for hazardous components. No hazardous materials present.

8.3. Personal protective equipment:

Respiratory: Not required for normal handling.

Protective gloves: Not required for normal handling, if tape is hot, gloves are recommended as good industrial practice.

Eye/Face: Safety glasses are recommended as good industrial practice.

Industrial Hygiene: Wash after handling, especially before eating drinking or smoking. Exercise good industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance: Adhesive tape Colour: Copper Odour: None.

9.2. Safety Related Information:

pH: Not determined

Boiling point/Boiling range: Copper – 2336°C

Melting point/Melting range: Copper – 1083°C

Flash point: Not determined

Flammability (solid): Not determined

Auto flammability: Not determined

Copper Tape Material Safety Data Sheet

Explosive properties:	Not determined
Oxidizing properties:	Not determined
Vapor pressure:	Not determined
Specific gravity:	Not determined
Solubility in water:	Not soluble
Solubility in organic solvent:	The adhesive layer/s is soluble in Toluene
Oil/water partition co-efficient:	Not determined
Other data:	
Vapor density (air=1):	Solid Material - Not relevant
Evaporation rate (ethyl ether = 1):	Solid Material - Not relevant
Viscosity:	Not determined
% Volatiles:	< 1.0 % @200°C (392°F)
Molecular weight:	Not determined

10. STABILITY AND REACTIVITY

10.1 Stability: Stable at normal temperatures. Store in its original packaging in a cool, dry place ideally 23°C +/- 2°C (73°F +/- 4°F) 50% +/- 2% relative humidity for a minimum of six months guaranteed. Copper becomes dull (tarnishes) with time when exposed to air.

10.2 Reactivity:

Conditions to avoid: None Known.

Materials to avoid: Can react with strong oxidizing agents.

Hazardous decomposition products:

Oxides of carbon, oxides of nitrogen, and small amounts of incompletely burned carbon products (e.g. aliphatic and aromatic hydrocarbons).

11. TOXICOLOGICAL INFORMATION**Possible Health Effects**

Skin:¹ Prolonged or repeated contact may lead to slight irritation.

Eyes:¹ May cause temporary discomfort.

Inhalation:¹ No adverse effects are normally expected.

Ingestion:¹ Ingestion of metallic copper could be moderately irritating to the gastrointestinal tract.

Other health hazard information: None known.

LC 50: Not determined.

LD 50: Not determined.

Copper Tape Material Safety Data Sheet

¹ This information is based either on test data, extrapolation from tests on similar materials, review of component details, or a combination of all of these.

12. ECOLOGICAL IMPACT

12.1 Elimination Persistence: Not known.
Degradability: Not known.

12.2 Behavior in an aquatic environment
Mobility: Insoluble in water.
Bioaccumulation: Not known.

12.3 Aquatic: Ecotoxic effects not known.
Terrestrial: Not known.

13. WASTE DISPOSAL

13.1. Product disposal: Can be incinerated or land filled in accordance with federal, state and local regulations.

13.1.1. Recycling: As in the case of other, metal based products, copper is a valuable and recyclable material, Therefore attempts should be made to recycle this product in compliance with local recycling regulations.

Abfallschlüsselnummer (Germany) Copper – 12 01 03
Plastic – 16 01 19

13.2. Packaging disposal: Packaging should be disposed of in accordance with regional and/or national regulations.

Abfallschlüsselnummer (Germany) Paper (Packaging) – 15 01 01
Cardboard Core -- 15 01 01
Plastic Packaging material & Polyethylene Core -- 15 01 02
Wooden Pallets – 15 01 03

14. TRANSPORT INFORMATION

UN Number: Not Applicable

ROAD & RAIL TRANSPORT (ADR/RID) No special packaging or labeling required.
In accordance with classifications of ADR 2007 Section 2.1.1.1., this product is defined as being "NOT DANGEROUS" and therefore it has no road or rail transport restrictions.

SEA TRANSPORT (IMO) No special packaging or labeling required.

Copper Tape Material Safety Data Sheet

IMO MARINE POLLUTANT:	Not applicable.
AIR TRANSPORT (ICAO)	No special packaging or labeling required.

15. REGULATORY INFORMATION15.1. EEC Supply classification & labelling:¹

Contains: Not applicable.

No special packaging or labeling requirements.

15.2 National legislation

For product information in other EC languages, including appropriate national legislation, please contact the relevant sales office at the above address.

15.3 Other regulations

German water class:¹

Slight risk of causing water pollution.

German Vbf:

Not applicable.

Ozone depleting chemicals:

No ozone depleting chemicals are present or used in manufacture.

¹ According to 93/18/EEC as adapted for the 3rd time to technical progress commission directive 88/379/EEC.

16. OTHER INFORMATION

This product safety data sheet was prepared in compliance with Commission Directive 2006/121/EC, 2001/58/EC, 93/112/EC, 67/548/EEC, 88/379/EEC and 1999/45/EC as well as their relevant amendments, on the approximation of laws, regulations (including REGULATION (EC) No. 1907/2006 **REACH**) and administrative provisions relative to the classification, packaging and labeling of dangerous substances and preparations.

It is the responsibility of persons in receipt of this Health & Safety Data Sheet to ensure that the information contained herein is properly read and understood by all people who may use, handle dispose or in any way come in contact with the product. If the recipient

Copper Tape Material Safety Data Sheet

subsequently produces a product containing the AMPETRONIC product it is the recipient's sole responsibility to ensure the transfer of all relevant information from the AMPETRONIC Health & Safety Data Sheet in compliance with Commission Directive 1999/45/EC.

All information and instructions provided in this Health & Safety Data Sheet (HSDS or MSDS - Material Safety Data Sheet) are based on the current state scientific and technical knowledge at the date indicated on the present HSDS / MSDS. AMPETRONIC shall not be held responsible for any defect in the product covered by this HSDS / MSDS should the existence of this defect not be detectable considering the current state of scientific and technical knowledge.

Please note:

For customers sourcing AMPETRONIC products in regions other than the European Union, the Health & Safety data sheet will reflect the requirements of existing local legislation. This may result in a different format and presentation of hazard classification information.