

MATERIAL SAFETY DATA SHEET

1. Identification of the Substance/Preparation and Company

Alloys: Lead Free Solder Alloys/Casting Alloys

Product Name: 99SC Lead Free Solder

Supplier: Grosvenor Electronic Supplies (UK)
Priority Tec. Park, Saxon Way,
Hessle,
East Yorkshire,
HU13 9PB

Tel No: 01482 627327

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E-mail: sales@grosvenor-group.com

2. Composition and Information on Ingredients

Note: Solder wire and bar is considered to be an article and is not subject to the Classification (Hazard Information and Packaging for Supply) Regulations 1994, because it is not hazardous as supplied. However, this product may become hazardous in use and the information included in this data sheet reflects the hazards associated with solder reflow operations.

3. Hazards Identification

Inhalation of the fumes given off by the fluxes used with these alloys may irritate the nose, throat and respiratory system. Refer to the suppliers safety data sheet for the specific flux used.

4. First Aid Measures

Inhalation: Fumes given off by fluxes used with these alloys may irritate the nose and throat.
Remove patient to fresh air. Obtain medical attention if there is any respiratory distress.

Ingestion:	Not relevant
Skin Contact:	Not likely to have a harmful effect on the skin. Wash hands with soap and water after handling solder. If any skin irritation develops seek medical attention
Eye Contact:	Flux fumes may irritate the eyes. The flux may spit during soldering. Flush immediately with plenty of water. In cases where spitting flux has entered the eye seek medical attention.

5. Fire Fighting Measures

Extinguishers	Suitable – dry chemical, carbon dioxide, water spray or foam, Unsuitable – water jet
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6. Accidental Release Measures

Not applicable

7. Handling and Storage

The flux fumes produced during soldering should be extracted away from breathing zone of the operators. Avoid inhaling flux fumes. Ensure that the general area is well ventilated. Wash hands with soap and water after handling solder, particularly before eating, drinking or smoking. This product should be stored in a cool, dry area. Keep out of reach of children and away from food and drink.

8. Exposure Controls – Personal Protection

Extraction should be provided to control exposure to flux fumes. Suitable examples include bench top, soldering iron tip extraction or an extraction arm.

Occupational Exposure Limits

None assigned

Respiratory Protection: Necessary if there is a risk of exposure to high concentrations of flux fumes.

Eye Protection: Operators should wear safety glasses or goggles to protect the eyes from the spitting flux.

9. Physical and Chemical Properties

Appearance: Silver white to grey alloy wire
Odour: Odourless at ambient temperatures
Solubility in water: Insoluble

10. Stability and Reactivity

Materials to Avoid

Solder will react with concentrated nitric acid to release toxic fumes of nitric acid, which oxidises to nitrogen dioxide, a red gas with a pungent odour. If personnel are exposed to these gases then immediate medical attention should be sought as symptoms can be delayed for a considerable time and can be fatal.

Under reducing conditions alloy 95A may generate the toxic gas stibine (antimony trihydride)

11. Toxicological Information

Acute Toxicity

The fumes from the fluxes used with these alloys may irritate the nose, throat and respiratory system.

Chronic Toxicity

There are no known chronic effects associated with the use of lead-free solder alloys.

12. Ecological Information

These products have little adverse effect on aquatic or terrestrial life.

13. Disposal

Wherever possible unwanted solder should be recycled for recovery of metal. Otherwise disposal should be in accordance with local and national legislation. In the UK this is the Control of Pollution Act 1974, the Environmental Protection Act 1990 and regulations made under them.

14. Transport Information

Solder alloy is not classified as hazardous for transport

15. Regulatory Information

Classification according to the chemicals (Hazard Information and Packaging for Supply) Regulations 1994:

Solder alloy is considered to be an article and is not subject to the above regulations.

Applicable EC Directives

Dangerous Substances Directive 67/548/EEC as amended by Directive 92/32/EEC

Dangerous Preparations Directive 88/379/EEC as amended by Directive 90/492/EEC

Directive 80/1107/EEC on the protection of workers from the risk related to exposure to physical, chemical and biological agents at work.

Applicable UK Legislation

The Health and Safety at Work etc. Act 1974

The Control of Substances Hazardous to Health Regulations 1994

The Management of Health and Safety at Work Regulations 1992

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16. Other Information

Recommended Uses

This safety data sheet covers a range of lead-free solder alloys. For information on application and use reference should be made to the Grosvenor Data Sheets.

Further Detailed Guidance from the UK Health and Safety Executive

HS(G) 37: An Introduction to Local Exhaust Ventilation

HS(G) 53: Respiratory Protective Equipment - a practical Guide for Users

HS(G) 97: A step by Step Guide to the COSHH Regulations

Approved Code of Practice - Management of Health and Safety at Work

General Approved Code of Practice to the COSHH Regulations

EH40: Occupational Exposure Limits (revised annually)

This safety data sheet is based on the requirements of the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994, (Commission Directive 91/155/EEC, as amended by Directive 93/112/EEC.)

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