

**MULTICORE SOLDERS**

A Division of Henkel Loctite Adhesives Limited  
Health & Regulatory Affairs

**96S EN Arax SS Solder wire**  
96S EN Arax SS 3.00 EN 10.06.03

This safety data sheet has been prepared in accordance with the requirements of the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 which implement EC Directives 1999/45/EC and 2001/58/EC, and provides information relating to the safe handling and use of the product.

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**1. PRODUCT AND COMPANY IDENTIFICATION**

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<b>Product Code</b>	Multicore 96S EN Arax SS
<b>Manufacturer/Supplier</b>	HLA Multicore
<b>Address</b>	Kelsey House, Wood Lane End, Hemel Hempstead, Hertfordshire, HP2 4RQ, UK
<b>Phone Number</b>	+44 (0) 1442 233233
<b>Fax Number</b>	+44 (0) 269554
<b>Emergency Phone Number</b>	+44 (0) 1442 233233

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**2. COMPOSITION/INFORMATION ON INGREDIENTS**

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**Nature** Lead-free, flux-cored solder wire

**Hazardous Components in Product for EC**

Component Name	CAS	EINECS	Concentration	R Phrases	Classification
Tin/Silver alloy	-	-	95 - 100	-	-
Ammonium chloride	12125-02-9	235-186-4	1 - 5	R22-36	Xn
Ammonium bifluoride	1341-49-7	215-676-4	1 - 5	R 25-34	T, C

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**3. HAZARD IDENTIFICATION**

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Inhalation of the flux fumes given off at soldering temperatures will irritate the nose, throat and respiratory system. Repeated or prolonged exposure to flux fumes may cause shortness of breath and cough. Skin exposed to flux fume may develop irritation and rash. If absorbed into the body, fluorides may cause acute systemic poisoning.

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**4. FIRST AID MEASURES**

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**First Aid - Inhalation**

Remove patient to fresh air. In case of respiratory difficulty seek medical attention.

**First Aid - Skin**

Wash with plenty of soap and water. If irritation persists, seek medical advice.

**First Aid - Eyes**

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

**First Aid - Ingestion**

Seek medical advice.

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**5. FIRE FIGHTING MEASURES**

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Use water spray, alcohol resistant foam, dry powder or carbon dioxide. Do not use water on molten metal. High temperatures may produce toxic fumes and vapours containing heavy metals. The flux will evolve irritating fumes. Wear self-contained breathing apparatus.

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**6. ACCIDENTAL RELEASE MEASURES**

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Not applicable.

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**7. HANDLING AND STORAGE**

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**Handling**

Use in a well ventilated area. Do not eat, drink or smoke during use. Wash hands after handling solder wire.

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**7. HANDLING AND STORAGE**

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**Storage**

Store in a cool, dry area. Keep out of reach of children and away from food and drink.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**Occupational exposure limits**

Ammonium chloride fume	OES: 10 mg/m <sup>3</sup> 8-hr TWA STEL: 20 mg/m <sup>3</sup> 15 min
Fluoride (as F)	STEL: 2.5 mg/m <sup>3</sup> 15 min

Extraction is necessary to remove fumes evolved during reflow.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Physical State</b>	Solid
<b>Colour</b>	Grey
<b>Odour</b>	None
<b>pH</b>	Not applicable
<b>Boiling Range/Point (°C)</b>	Not determined
<b>Melting point (°C)</b>	221 (solder alloy)
<b>Flash Point (CC) (°C)</b>	None
<b>Specific Gravity</b>	7.5
<b>Solubility in Water (kg/m<sup>3</sup>)</b>	Insoluble
<b>Solubility in Acetone</b>	Insoluble
<b>Vapour Pressure (mmHg @ 25°C)</b>	None
<b>Explosion Limits (%)</b>	Not applicable

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**10. STABILITY AND REACTIVITY**

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Stable under normal conditions. Solder alloy will react with concentrated nitric acid to produce toxic fumes of nitrogen oxides. Toxic effects may be delayed, sudden and severe. Obtain medical attention urgently.

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**11. TOXICOLOGICAL INFORMATION**

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**Inhalation**

The product does not present a risk at ambient temperatures. The flux fumes evolved during soldering will irritate the nose, throat and lungs.

**Skin**

Contact with flux fumes and flux residues may cause irritation.

**Eyes**

Flux fumes may cause irritation.

**Ingestion**

Absorption of fluoride into the body may cause salivation, abdominal pain, nausea, vomiting and diarrhoea.

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**12. ECOLOGICAL INFORMATION**

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The product is not biodegradable.

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**13. DISPOSAL CONSIDERATIONS**

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Wherever possible unwanted solder wire should be recycled for recovery of metal. Otherwise dispose of in accordance with local and national regulations.



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**14. TRANSPORT INFORMATION**

<b>UN Number</b>	None
<b>AIR (IATA)</b>	Not classified
<b>Sea (IMO)</b>	Not classified
<b>Road (ADR)/Rail(RID)</b>	Not classified

**15. REGULATORY INFORMATION**

<b>Contains</b>	Not applicable
<b>Labelling Information</b>	Not classified
<b>R phrases</b>	None
<b>S phrases</b>	None
<b>Voluntary Labelling</b>	Avoid breathing fumes given out during soldering. Flux fumes may irritate the nose, throat and lungs.  After handling solder wash hands with soap and water before eating drinking and smoking.  Keep out of reach of children.

**Hazardous Components in Product for EC**

<b>Component Name</b>	<b>R Phrases</b>
Ammonium chloride	R22-36
Ammonium bifluoride	R25-34
R22	Harmful if swallowed
R25	Toxic if swallowed
R34	Causes burns
R36	Irritating to eyes

**Applicable EC Directives**

Directive 98/24/EC on the protection of the health and safety of workers from the risk related to exposure to chemicals at work (Chemical Agents Directive)

**Applicable UK Legislation and guidance**

The Health and Safety at Work etc. Act 1974  
The Control of Substances Hazardous to Health Regulations 2002

L5	Approved Codes of Practice to the COSHH Regulations.
EH40	Occupational Exposure Limits (revised annually)
HS G 37	An Introduction to Local Exhaust Ventilation.
HS G 61	Surveillance of People Exposed to Health Risks at Work.
HS G 97	A Step by Step Guide to the COSHH Regulations.
HS G 193	COSHH essentials: Easy steps to control chemicals.

**16. OTHER INFORMATION**

**MSDS data revised** 10 June 2003

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Further Information may be obtained from:-

HLA Multicore  
Wood Lane End



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## 16. OTHER INFORMATION

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The information in this safety data sheet was obtained from reputable sources and to the best of our knowledge is accurate and current at the mentioned date. Neither HLA Multicore nor its subsidiary companies accept any liability arising out of the use of the information provided here or the use, application or processing of the product(s) described herein. Attention of users is drawn to the possible hazards from improper use of the product(s).

This safety data sheet was prepared in accordance with Commission Directive 2001/59/EC adapting to technical progress for the 28th time Council Directive 67/548/EEC and Commission Directive 1999/45/EC.

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