

SD0212 v3.1 RS 295-4814, 295-4820, 295-4836, 295-4842, 436-4853**RS CHIP3 MSDS Date 01/02/06**

Revision Date: 02/03/05

Version: 5

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: 60EN Ecosol® 105
Product Type: Flux-cored solder wire
Manufacturer/Supplier: HLA Multicore
Address: Technologies House, Wood Lane End,
Hemel Hempstead, Hertfordshire,
HP2 4RQ, United Kingdom
Phone Number: +44 (0) 1442 278000
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Supplied by:
RS Components Ltd.
Birchington Road, Corby, Northants, NN17 9RS.
Tel: (01536) 402888

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS	EINECS	%	Classification
Tin/Lead alloy:	-	-	-	-
Tin	7440-31-5	231-141-8	50 - 60	-
Lead	7439-92-1	231-100-4	30 - 40	-

3. HAZARD IDENTIFICATION

Flux fumes emitted during reflow will irritate the nose and throat. If solder is exposed to temperatures above 500°C then lead dust, fume and/or vapour may be produced.

4. FIRST AID MEASURES**Inhalation:**

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

Skin:

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

Eyes:

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

Ingestion:

Seek medical advice.

5. FIRE FIGHTING MEASURES

The product itself does not burn. Use extinguishing measures appropriate to local circumstances and the surrounding environment. 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.

6. ACCIDENTAL RELEASE MEASURES

Not applicable.

7. HANDLING AND STORAGE**Handling:**

Use only in area provided with appropriate exhaust ventilation. Do not eat, drink or smoke during use. Wash hands after handling solder wire.

Storage:

Store in a cool, dry place. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Workplace Exposure Limits:**Lead 0.15 mg/m³**Engineering controls:**

Extraction is necessary to remove fumes evolved during reflow. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

Skin protection:

No special protective equipment required.

Eye/face protection:

Safety glasses should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Colour:	Grey
Odour:	None
pH:	Not applicable
Boiling Range/Point:	Lead fume will be significant above 500°C
Melting point (°C):	183 - 188°C (solder alloy)
Flash Point (°C);	None
Explosion Limits:	Not applicable
Specific Gravity:	8.5
Solubility in Water:	Insoluble
Vapour Pressure:	Negligible at ambient temperatures

10. STABILITY AND REACTIVITY

Stable under recommended storage conditions. Solder alloy will react with concentrated nitric acid to produce toxic fumes of nitrogen oxides.

11. TOXICOLOGICAL INFORMATION**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:

Chronic overexposure to lead may result in damage to the blood forming, nervous, urinary and reproductive systems. Severe lead toxicity will cause sterility, abortion and neonatal mortality and morbidity.

12. ECOLOGICAL INFORMATION

The product is not biodegradable.

13. DISPOSAL CONSIDERATIONS**Disposal methods:**

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

European Waste Catalogue:

06 04 05 - wastes containing other heavy metals.

14. TRANSPORT INFORMATION**ICAO/IATA (Air):**

UN Number: None
 Proper Shipping Name: Not regulated
 Hazard Class or Division: None
 Packing Group: None

IMO/IMDG (Sea)

UN Number: None
 Proper Shipping Name: Not regulated
 Hazard Class or Division: None
 Packing Group: None

ADR/RID (Road/Rail)

UN Number: None
 Proper Shipping Name: Not regulated
 Hazard Class or Division: None
 Packing Group: None

15. REGULATORY INFORMATION

Contains: Not applicable
 Labelling Information: Not classified
 R Phrases: None
 S Phrases: None
 Additional Labelling: Contains lead which may harm your health. Lead can cause birth defects and other reproductive harm.
 Regulations forbid the use of lead containing solder in any private or public drinking water supply system.
 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.

Applicable UK Legislation and Guidance

The Health & Safety at Work etc. Act
 The Control of Substances Hazardous to Health Regulations 2002
 L5: General Approved Code of Practice to the COSHH Regulations
 HS(G)193: COSHH essentials: Easy steps to control chemicals
 The Control of Lead at Work Regulations 2002
 L132: Control of Lead at Work: Approved Code of Practice and Guidance

16. OTHER INFORMATION

MSDS data revised: 02/03/05
 Supersedes sheet dated: 29/05/03
 Prepared by:

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Explanation of Section 2 R-Phrases:

Not applicable.