

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY

Product Name Roller Tin Solder 60/40 (Tru-Alloy Electronic Solders)

Mega Part Numbers **500-027 & 500-028**

Manufacturer Plimto Limited, Industrial Estate, Thruxton Airfield, Andover, Hampshire SP11 8PW

Telephone/Fax Tel: 01264 773173 Fax: 01264 772936

Supplier: Mega Electronics Ltd, Mega Hs, Grip Industrial Estate, Linton, Cambridge, CB21 4XN

Telephone/Fax Tel: 01223 893900 Fax: 01223 893894

2. COMPOSITION/INFORMATION ON INGREDIENTS

Composition Alloys of Tin and Lead

Component	CAS No	Symbol	Risk Phase	%W/W
Tin Metal	7440-31-5	N/A	N/A	60 to 63 ± 1
Lead Metal	7439-92-1	T	20/22-33-61	37 to 40 ± 1

Risk Phases

20/22

Harmful By inhalation and if swallowed

R33

Danger of cumulative effects

R61

May cause harm to unborn child

3. HAZARDS IDENTIFICATION

Inhalation and ingestion of dust and fumes can cause severe damage to heart, lungs, kidneys and liver.

4. FIRST AID MEASURES

First aid measures

Inhalation (Fumes) remove patient to fresh air and seek medical attention.

Skin Wash skin thoroughly with warm water and soap.

Eyes (Molten metal) see burns below.

Burns Cool burn site immediately with clean cold water and seek medical attention.

5. FIRE FIGHTING MEASURES

Extinguisher Media Dry chemical powder.

Special fire fighting Avoid water which will cause molten solder procedures to explode.

Protective Equipment Full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions N/A

Environmental precautions N/A

7. HANDLING AND STORAGE

Handling Wear gloves when handling

Storage Precautions should be taken not to generate dust

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Maximum Exposure Limits (MEL,s)

Substance	Long Term Exposure Limits (8 hour TWA)	Short Term Exposure Limits (15 min)
Tin Metal	2.00mg/m ³	N/A
Lead Metal	0.015mg/m ³	N/A

Occupational exposure limits Only apply when solder is overheated normally over 500C

Personal protection equipment

Clothing Washable or disposable overalls, gloves

Eyes Safety goggles or eye shield

9. PHYSICAL AND CHEMICAL PROPERTIES

Explosion Limit	No explosion hazard
Form	Sticks, bars and ingots.
Colour	Silvery.
Melting Point	150C to 310C Depending on alloy
Solubility in water	Insoluble in water
Flamability	Non-flammable

10. STABILITY AND REACTIVITY

Stability Stable

Hazardous decomposition Avoid fumes from overheating normally above 500C

11. TOXICOLOGICAL INFORMATION

Acute Toxicity - Inhalation	Recommended exposure limit of fume when overheated
	Lead 0.15mg/m ³
	Tin 2.00mg/m ³
Human Effects	Lead can cause weakness, vomiting, loss of appetite convulsions and stupor.
Chronic Toxicity	Lead can cause weakness. Insomnia, hypertension, headaches and pains in the joints. Chronic exposure to lead may result in damage to blood – forming, nervous, urinary and reproductive systems.

12. ECOLOGICAL INFORMATION

Prevent contamination of soil.
Tin and Lead are non degradable and will persist in the environment, and are insoluble in water and not attacked by most inorganic acids and bases.

13. DISPOSAL CONSIDERATIONS

Waste Disposal	Store in closed containers and dispose of in accordance with local and national legislation. Ideally this product should be sent to a licensed recycling company and should on no account be sent to a landfill site
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14. TRANSPORT INFORMATION

Not classed as Hazardous for transportation

15. REGULATORY INFORMATION

Classification	X - Harmful
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16. OTHER INFORMATION

17. REVISION DATES

Date of Issue : July 2000
Revised Date: September 2002
Replacing All previous Material Safety Data Sheets

The information and recommendations on this sheet relate to the specific materials designated and may not be valid for such material used in combination with any other materials or in any process. The information is given in good faith and is believed accurate and reliable at the time of preparation.

Nothing hereon is to be construed as a guarantee express or implied, in all cases it is the responsibility of the user to determine the applicability of this information or the suitability of the products for his own particular purposes.

DATA SHEET - SOLDERS

INTRODUCTION

Tru-Alloy is the name that guarantees high purity electronic grade tin/lead solders which are manufactured exclusively from virgin materials.

TRACEABILITY

As a fully registered BS EN ISO 9001:2000 Company full traceability is always maintained and all records are open to inspection by prior arrangement.

COMPOSITION

Tru-Alloy solders are manufactured in three popular grades as standard. Other grades can be manufactured to the customer's own specification.

Tru-Alloy 63/37 conforms to BS EN 29453 1994 Alloy No.1a formerly BS 219 Grade "AP" although the purity is greater than that called for by the specification.

Tru-Alloy 60/40 conforms to BS EN 29453 1994 Alloy No.2a formerly BS 219 Grade "KP" although the purity is greater than that called for by the specification

Tru-Alloy TSC Lead Free Alloy Tin Sn 95.5-96% Copper Cu 0.5-1% Silver Ag 3.3-4%

Melting Range 1a 63/36

Solidus....183°C
Liquidus..185°C

Melting Range 2a 60/40

Solidus....183° C
Liquidus...188° C

Melting Range TSC

Solidus....217° C
Liquidus...217° C

Tru-Alloy Solders also conform to:-

QQS-571E DIN 1707 ASTM B32 NFC90 550

SIZES AVAILABLE - 1 KG BARS / 250 GM STICKS OR CHIPS FOR SMALLER BATHS