



| <b>SECTION 1. PRODUCT AND COMPANY IDENTIFICATION</b> |   |
|--|---|
| Trade Name   | Almit SJ 7 Solder Paste   |
| Products covered by these Safety Data Sheet's        | SJ-7 V14L, V14LH  |
| Manufacturer / Supplier                              | Almit Technology Ltd.   |
| Address  | Unit 7 Forest Row Business Park<br>Station Road, Forest Row<br>East Sussex RH18 5DW |
| Phone Number ( United Kingdom )                      | 01342 822 844   |
| Fax Number ( United Kingdom )                        | 01342 824 155   |

| <b>SECTION 2. COMPOSITION AND INFORMATION ON THE INGREDIENTS</b> |                |                |                |          |          |
|--|----------------|----------------|----------------|----------|----------|
| Preparation – Hazardous Components (%w/w)                        |                |                |                |          |          |
| Colophony  | Tin            | Lead           | Silver         | Bismuth  | Antimony |
| 9 – 13   | 60.00 - 65.00  | 30.00 - 40.00  | 2.5 - 3.5      | 0 - 1.00 | 0 - 1.00 |
| R42/43   | R36/37/38      | R20/21/22/33   | R36/37/38      | TBA      | TBA      |
| Irritant   | Not Classified | Not Classified | Not Classified | TBA      | TBA      |

| <b>SECTION 3. HAZARDS IDENTIFICATION</b> |   |
|--|---|
| Main Hazards                             | Contact with the molten liquid will cause severe burns. Repeated exposure may cause cumulative effects. Sensitisation by Skin Contact. See also Hazardous products of Decomposition.  |
| Health Effects - Eyes                    | Molten liquid will cause severe burns and may result in blindness. Rosin core may cause conjunctival irritation and poss. corneal damage.   |
| Health Effects - Skin                    | Contact with the molten liquid will cause severe burns. Repeated or prolonged contact with the Flux core may cause Itching, Sensitisation, Soreness, Defatting of the skin and Dermatitis.  |
| Health Effects - Ingestion               | Contact with the molten liquid will cause severe burns.<br>Solder alloy contains Lead which is a cumulative poison and slow elimination from the body.<br>Long term exposure may include:- Constipation or Diarrhoea, Fatigue, Anorexia, Abdominal pain, Reduction in the oxygen carrying capacity of the blood.<br>Swallowing may cause irritation of the mouth & digestive tract.<br>Inhalation of fumes may cause Pulmonary sensitisation, and Asthma. |

| <b>SECTION 4. FIRST AID MEASURES</b> |   |
|--------------------------------------|---|
| Eye contact                          | Flood the eye immediately with copious amounts of cool fresh water for 10 - 15mins. Pay particular attention to under the eyelids. Call for immediate medical attention.  |
| Skin contact                         | Wash the skin with soap and warm water. If any soreness or inflammation persists call for medical attention.<br>Wash all contaminated workwear before reuse.<br>After contact with molten liquid, flood with cold water.<br>Call for immediate medical attention. |
| Ingestion                            | Do not induce vomiting. Keep warm and rest. Wash out mouth. Call for immediate medical attention.   |
| Inhalation                           | Remove at once to fresh air. Keep warm and rest.<br>Call for immediate medical attention if there is any respiratory distress.  |

| <b>SECTION 5. FIRE FIGHTING MEASURES</b> |   |
|--|---|
| Extinguishing media                      | Use an Alcohol resistant foam, Water spray, Dry chemical or Carbon Dioxide. Sand may be used for small fires. |
| Unsuitable Extinguishing media           | <b>Do NOT use water jet.</b>  |
| Special hazards                          | Gives off hazardous fumes in a fire.  |
| Fire fighters protective equipment       | Wear full protective clothing and Self contained breathing apparatus operating in the positive pressure mode. |

| <b>SECTION 6. ACCIDENTAL RELEASE MEASURES</b> |  |
|---|--|
| Personal precautions                          | Wear the appropriate protective clothing   |
| Environmental precautions                     | Prevent any material entering watercourses and drains etc. Advise the Local and River authorities if spillage has entered watercourses soil or vegetation. |
| Spillage                                      | Wipe up with disposable towels, transfer waste into a suitable container for safe disposal. Avoid creating dust.   |

| <b>SECTION 7. HANDLING AND STORAGE</b> |   |
|--|---|
| Handling                               | Avoid contact with the eyes and skin. Avoid breathing fumes and dust. Use local exhaust ventilation. Avoid contaminated workwear. |
| Storage                                | Store in a cool dry ventilated area in manufactures containers. Ensure correctly labelled.  |

## SECTION 8. PERSONAL PROTECTION AND EXPOSURE CONTROL

|  |   |
|--|---|
| National standards for Occupational Exposure Colophony<br><br>Lead<br>Tin<br><br>Silver<br>Bismuth<br>Antimony | <p><b>See also Regulatory Information.</b></p> <p>Capable of causing respiratory sensitisation.<br/>Rosin core solder pyrolysis products (as Formaldehyde).<br/>UK EH40: MEL 0.05 mg/m<sup>3</sup> 8 hr TWA.<br/>UK EH40: MEL, STEL 0.15mg/m<sup>3</sup> 15 mins.<br/>Control of Lead at Work Regulations: 0.15 mg/m<sup>3</sup> 8 hr TWA.<br/>UK EH40: OES 2mg/m<sup>3</sup> 8 hr TWA.<br/>UK EH40: OES, STEL 4mg/m<sup>3</sup> 15 mins.<br/>UK EH40: OES 0.1mg/m<sup>3</sup> 8h TWA.<br/>TBA<br/>UK EH40: MEL 0.5 mg/m<sup>3</sup> 8hr TWA.</p> |
| Engineering control procedures   | <p>Engineering solutions should be implemented to prevent or reduce exposure to soldering fumes and dust.<br/>Fumes from Soldering should not be inhaled.<br/>This should include process or personnel enclosure, Mechanical dust and fume extraction to atmosphere / scrubber.<br/>Control of process to reduce or eliminate emissions.<br/>Documented process and safety controls and personnel protection, Gloves, Masks etc.</p>  |
| Respiratory protection   | Where there is a <b>high risk</b> to fume and dust ingestion a respirator should be worn.   |
| Hand protection  | When handling hot liquid ( to be avoided if possible ) thick thermally insulating gloves should be worn. Avoid damp or wet gloves. Wash hands after handling with soap & warm water, particularly before eating or drinking.  |
| Eye and Facial protection  | A full heat resistant helmet face shield should be worn, when handling hot liquid. Goggles or Safety glasses as appropriate.  |
| Body protection  | Normal industrial workwear, avoid exposed skin.   |

### **Biological Standards**

For blood lead monitoring and medical surveillance requirements, refer to the HSC Approved code of practice supporting the Control of Lead at Work Regulations.

Employees should be under medical surveillance **IF** the Risk Assessment made under the Control of Lead at Work Regulations indicates they are likely to be exposed to significant concentrations of lead, or if the Company medical advisor or a Doctor certifies that an employee should be under medical surveillance.

A female employed on work which exposes her to lead **MUST** notify her employer as soon as possible if she becomes pregnant. The Company medical Adviser should be advised of her pregnancy and working environment i.e.: **Exposure to Lead.**

Under the management of Health And Safety at Work ( Amendment ) Regulations 1994 employers should assess the risks at work to the health of pregnant workers, those who have recently given birth, or who are currently Breast feeding.

| <b>SECTION 9. CHEMICAL AND PHYSICAL PROPERTIES</b>  |   |
|---|---|
| Density ( g/cm <sup>-3</sup> ) at 20 <sup>0</sup> C | 8.4 Approx.                             |
| Liquidus  | 179 <sup>0</sup> C - 187 <sup>0</sup> C |
| Colour and appearance                               | Grey metallic.                          |
| Physical state                                      | Metallic paste                          |
| Solubility in Water                                 | Insoluble                               |
| Odour   | Mild                                    |

| <b>SECTION 10. STABILITY AND REACTIVITY</b> |   |
|---|---|
| Stability                                   | Stable under all normal factory condition's.  |
| Conditions to avoid                         | None known.   |
| Materials to avoid                          | Solder will react with concentrated Nitric Acid to release Nitric Oxide which will oxidise to Nitrogen Dioxide. Workers exposed to these gasses should seek medical attention. Other strong acids may also react in a similar way. Flux will react with strong oxidising agents, with potentially explosive violence. |
| Hazardous Decomposition products            | Molten liquid may give of fumes. Avoid temps. above 500 <sup>0</sup> C<br>Heated Colophony gives rise to fumes associated with asthma.  |

| <b>SECTION 11. TOXICOLOGICAL INFORMATION</b> |  |
|--|--|
| Acute toxicity                               | Can lead to weakness, insomnia, hypertension, headaches and joint pains. Low order of acute toxicity.                                |
| Irritancy - Eyes                             | May cause conjunctival irritation, corneal damage, and iritis.   |
| Irritancy - Skin                             | May cause skin irritation.   |
| Reproductive and Developmental               | Lead may cause developmental problems in a foetus.   |
| Skin contact                                 | Absorption through the skin is not significant.  |
| Chronic Toxicity / Carcinogens               | Damage in the blood – forming, nervous, urinary and reproductive systems. Lead is classified as a 2B carcinogen by the IARC ( 1987 ) |
| Human  | Inhalation may cause sensitisation of the respiratory system.  |

| <b>SECTION 12. ENVIRONMENTAL INFORMATION</b> |   |
|--|---|
| Ecotoxicity                                  | Rated as slightly toxic to Aquatic species.                       |
| Degradability and Persistence                | Resistant to Bio-degradation.                                     |
| Bio-accumulation                             | Has the potential to bio-accumulate.                              |
| Mobility                                     | A small portion will dissolve in water, and will accumulate soil. |

| <b>SECTION 13. DISPOSAL PROCEDURES</b> |  |
|--|--|
| Product disposal                       | Waste should be disposed under the "Special Waste" regulations. COPA 1980. Metal should be re-cycled if possible and disposed through your metal supplier if possible. Control of Pollution Act 1974, and the Environmental Protection Act 1990. |
| Container disposal                     | Containers must not be re-used. Dispose with care. See above.  |

| <b>SECTION 14. TRANSPORT PROCEDURES</b> |  |
|---|--|
| UN Number                               | Not Classified as hazardous for transport. |
| ADR/RID - Class                         | Not Classified as hazardous for transport. |
| IMDG - Class                            | Not Classified as hazardous for transport. |
| IMDG - Marine pollutant                 | No.  |
| IATA - Class                            | Not Classified as hazardous for transport. |

| <b>SECTION 15. REGULATORY INFORMATION</b>   |   |
|---|---|
| Label Information   | Health, Safety, Environment. Irritant.  |
| Risk phrases  | R20/21/22: R33/36/37/38: R42/R43:   |
| Safety phrases  | P2 warning. Contains Lead. P8 warning. Contains Colophony S23, S24, & S37.  |
| EINECS Listing  | Not listed.   |
| EC Annex I classification   | Xi - Irritant.  |
| Applicable EC Directives  | Dangerous Substances Directive 67/548/EEC and as amended by Directive 92/32/EEC.<br>Dangerous Preparations Directive 88/379/EEC and as amended by Directive 90/492/EEC.<br>Lead at work Directive 82/605/EEC.   |
| Applicable UK Legislation   | The Control of substances Hazardous to Health Regulations 1994.<br>The Control of Lead at Work Act 1980.<br>The Health and Safety at Work Act 1974 .<br>The Management of Health and Safety at Work Regulations 1992.<br>The Management of Health and Safety at Work Regulations 1994 as Amended. |
| Technical Guidance  | An Introduction to Local Exhaust Ventilation HS(G)37:<br>A Step by Step Guide to the COSHH Regulations HS(G)97:   |
| This safety data sheet has been revised and re-written to comply with the Chemicals (Hazard Information & Packaging) Regulations 1993. Commission Directive 91/155/EEC. |   |

| <b>SECTION 16. OTHER INFORMATION</b>   |
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| <p>The information contained in this document is based on data considered to be accurate at the time of publication and is given free of charge. It is representative of typical product but batches may exhibit minor variations. No warranty is expressed or implied concerning the accuracy of this data.</p> <p>In case of doubt or for clarification Almit Technology should be consulted. Almit are unable to anticipate all conditions under which the product may be used, and users are advised to carry out an assessment of workplace risk and carry out their own tests to determine the Safety and Suitability for the process and conditions of use.</p> <p>This information is intended for use in the United Kingdom only, as different limits may be set in other countries. Please check with your Local and National Authorities or Supplier.</p> |

**End**