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SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

| | |
|------------------------|---|
| Trade Name | LINQALLOY™ SP-SAC305 |
| Applications: | Solder Paste for Surface Mount Technology |
| Advised Against | No further relevant information available |
| Supplier Name | Caplinq Europe BV |

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SECTION 2. HAZARDS IDENTIFICATION

PROPOSED CLASSIFICATION: Non-Irritant

HAZARD PICTOGRAMS:



HAZARD STATEMENTS

P301 Harmful if swallowed

P305 Irritate to eyes

PRECAUTIONARY STATEMENTS

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P338 Removes contact lenses if present and easy to do. Continue rinsing.

P351 Rinse cautiously with water for several minutes.

P352 Wash with plenty of soap and water.

POTENTIAL HEALTH EFFECTS

Eye Contact: May cause mild eye irritation.

Ingestion: May be hazardous to the digestive system, cause vomiting and loss of appetite.

Inhalation: May cause respiratory tract irritation.

Skin Contact: Does not cause skin inflammation, except at high temperatures

SECTION 3. INGREDIENT COMPOSITION

| No. | Components | CAS Reg. No. | Proportion (%) |
|--|------------|--------------|----------------|
| Alloy breakdowns: (Homogeneous mixture) | | | |
| 1 | Sn | 7440-31-5 | Bal. |

| | | | |
|----------------------------------|--------------------|------------|-----------|
| 2 | Ag | 7440-22-4 | 3.0±0.2 |
| 3 | Cu | 7440-50-8 | 0.7±0.2 |
| Flux Paste: (Uniform mixture) | | | 9.70±0.30 |
| 1 | Hydrogenated Rosin | 65997-06-0 | 2.0-8.5 |
| 2 | Resin | 65997-05-9 | 2.0-6.5 |
| 3 | Activator | 68937-72-4 | 1.5-3.8 |

SECTION 4. FIRST AID MEASURES

EYE CONTACT:

- Immediately flush with plenty of water for at least 15 min.
- Please ensure to wear protective glasses during a high-temperature operation. If contacted during a high temperature operation, please refer immediately for hospital treatment.

SKIN CONTACT:

- Immediately flush with plenty of water for at least 15 min.
- If contacted during a high temperature operation, immediately apply scald ointment for light injuries, otherwise please refer immediately for hospital treatment.

INHALATION:

- Move victim to fresh air.
- Administer oxygen if breathing is difficult.
- Get medical attention.

INGESTION:

- Do not administer anything orally if the patient is on the verge of losing consciousness, already unconscious, or experiencing convulsions.
- Do not induce vomiting.
- Get medical attention immediately.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Clean agent fire extinguisher, dry powder, carbon dioxide, or foam.
- Special fire fighting protective gears or suit.

SECTION 6. ACCIDENTAL RELEASE MEASURES

LEAK/SPILL

- In case of a leakage, use sand, earth, or inert materials to contain and control it. Flush with plenty of water to clean the spillage area.
- Report as per regulatory requirements.

SECTION 7. HANDLING AND STORAGE

HANDLING

- Ensure the availability of suitable protective and ventilation equipment. Wash hands thoroughly after getting in contact.
- Keep out of reach of children. Avoid breathing fumes and dust. Do not eat, drink, or smoke when using this product.
- Minimize eye exposure, and prevent inhalation of vapors. Do not stay in contact for an extended period.

STORAGE

- Store in a cool (air-condition room temperature) & dry place away from excessive heat, sunlight, and humidity. Ensure that the storage and usage area is strictly designated as a non-smoking zone.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE LIMITS:

| No | Components | Long Term Exposure Limits (PEL) | Short Term Exposure Limits (STEL) | Reference |
|----|--|---|-----------------------------------|-------------|
| 1 | Tin [Sn] | 2 mg/m ³ | Not established | OSHA, ACGIH |
| 2 | Silver [Ag] (Metal, metal dust, fumes, mist, and compounds) | 0.01 mg/m ³ 0.1 mg/m ³ | Not established | OSHA, ACGIH |
| 3 | Copper [Cu] (dust and mist) | 1.0 mg/m ³ | Not established | OSHA, ACGIH |

VENTILATION:

Use general or local exhaust ventilation to meet exposure limit requirements.

PERSONAL PROTECTION:

- Respiratory Protection: Wear a mask. Organic vapor canister or canister respiratory protector should be used when necessary.
- Eye/Skin Protection: Chemical safety splash goggles, eyewash equipment, and gloves (general rubber or lined) are recommended.
- Hand protection: Wear a heat resistant gloves

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|----------------------|
| Appearance: | Gray viscous liquid |
| Odor | Mild |
| Ph: | Not Applicable |
| Initial Melting Point/Melting Ranges: | 217 |
| Flash Point: | Not Applicable |
| Specific Gravity (g/cm³): | 7.4 |
| Vapour Pressure (Mm Of Hg At 25°C): | Not applicable |
| Solubility: | Not soluble in water |
| Vapour Density (Air = 1): | Not applicable |

SECTION 10. STABILITY & REACTIVITY

Chemical Stability: Stable under ordinary conditions of use and storage.

Conditions To Avoid: Not applicable.

Incompatible Substances: Mild reaction to strong oxidants, strong acids, strong bases or moisture.

Decomposition Products: No hazardous decomposition at normal circumstances, except above melting point

Hazardous Polymerization: No hazard at room temperature.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity Data: LD₅₀(oral) not applicable

Inhalation: Vapour may irritate respiratory system or lung and cause allergies or dermatitis

Ingestion: May cause stomach pain or vomiting

Carcinogenicity: No information found

Reproductive Effect: No information found

Chronic Effects: No information found

Target Organs: No information found

SECTION 12. ECOLOGICAL INFORMATION

Mobility: No Information found

Bioaccumulation: No information found

Biodegradability: No information found

Aquatic Toxicity: No information found

Environmental Toxicity: No information found

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of waste needs to be carried out at the city, state, or federally permitted disposal facility. Handle in accordance with applicable regulations and/or local authorities.

SECTION 14. TRANSPORT INFORMATION

Land transport ADR/RID (Cross-border)

ADR, RID Class: No information available

Maritime transport IMDG

IMDG Class: No information available

Air transport ICAO-TI and IATA-DGR

ICAO/IATA Class: No information available

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized safety officer. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15. REGULATORY INFORMATION

RoHS [Restriction of Hazardous Substances Directive]

This product does not contain the ten substances: lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE), bis(2-ethylhexyl) phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP) and diisobutyl phthalate (DIBP).

TSCA [Toxic Substances Control Act, USA]

All substances that are listed according to TSCA regulations.

SECTION 16. OTHER INFORMATION

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 CAPLINQ Corporation, nor CAPLINQ Europe BV accept any liability arising out of the use of the information provided here or the use, application or processing of the product described herein.

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COMMON ABBREVIATIONS AND ACRONYMS:

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

MARPOL: (from Marine Pollutant) International Convention for the Prevention of Marine Pollution from Ships

IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

UN: United Nations (also UNO: United Nations Organization)

NOEC: No Observed Effect Concentration

OECD: Organisation for Economic Co-operation and Development

ASTM: American Society for Testing and Materials

WAF: Water Accommodated Fraction

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative