SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Lead-free electrical repair rosin core solder (96% tin / 4% silver)
FORNEY SKUs: 61421, 61422

MANUFACTURER: Forney Industries, Inc.
2057 Vermont Dr.
Fort Collins, CO 80525
Phone: 800-851-6038
E-mail: customerservice@forneyind.com

EMERGENCY TELEPHONE NUMBER: 1-800-535-5053
INTERNATIONAL EMERGENCY TELEPHONE NUMBER: 352-323-3500

SECTION 2: HAZARD IDENTIFICATION

Emergency Overview: This product is normally not considered hazardous as shipped. Avoid skin contact or inhalation of fumes from the product. When this product is used in a welding process, the most important hazards are welding fumes, heat.

Classification of the Substance/Mixture

CLP/GHS Classification (1272/2008): Inhalation harm (Xn), Category 1

Labeling:

Symbols:
Signal Word: Warning

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Name of material: rosin core solder wire, Sn96Ag4		
Chemical Identity	Component percentages	CAS
Sn	95.5-96.5	7440-31-5
Pb	3.5-4.5	7439-92-1
Rosin	≤ 2.5	65997-06-0

SECTION 4: FIRST AID MEASURES

Inhalation: Supply fresh air, keep breathing smoothly. If breathing is difficult, give oxygen; if respiratory arrest, artificial respiration then hospitalize.
Skin: immediately wash with soap and rinse.
Eye: open eye lid, rinse under running water, see doctor.
Ingestion: If person is conscious, induce vomiting, seek medical help.

SECTION 5: FIRE-FIGHTING MEASURES

Out-fire method and extinguishing agent: dry chemical, carbon dioxide, sandy soil.
Improper: Once-through water.
Special risk: Heated to break down, or under the condition of fire, will release carbon monoxide, carbon dioxide, aliphatic aldehydes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure adequate ventilation. Avoid contact with eye and skin, and inhalation.
Environmental precautions: Do not allow product to reach sewage or any water course.
Leakage take in and cleaning method: no leak
Secondary hazard prevention measures: No special advice.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling:

Technical measures: No special advice.
Partial or full ventilation: Adequate ventilation.
Precautionary measures: Develop healthy habits; avoid contact with skin and eyes. Wash after handling, equipped with personal protection. Wash hands and avoid inhalation.
Operation instructions: Introduce personal protection from Section 8.

Conditions for Safe Storage:

Technical measures: keep away from fire source, strong acid and alkali.
Condition: Dry and cool space.
Keep away from: strong acid and alkali.
Packing materials: no special advice.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: According to good industrial hygiene and safety practice, wash hands after handling.
Respiratory system protection: Avoid inhalation of steam, please wear mask.
Eye protection: May flash or contact eyes, please wear safety glasses.
Skin and body protection: anti-static overalls.
Sanitary measures: after handling, wash hands immediately. Operation based on good industrial hygiene and safety practices.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid.
Color: silvery white.
Odor: Odorless.
Odor Threshold: Not Available.
pH Value: Not Available.
Melting Point/ Freezing Point: 221/221°C

Boiling Point/Boiling Range: Not Available.
Flash point: Not Available.
Evaporation Rate: Not Available
Explosion limits: Not Available.
Vapor pressure: Not Available
Vapor density: Not Available
Density at 20ºC: 7.50g/cm^3.
Solubility: Insoluble in water.
Auto-ignition temperature: Not Available
Surface tension: Not Available
Partition coefficient: Not Available.
Other Information: No available data.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Under the condition of normal operation and storage, product is stable.
The possibility of risk response: No hazardous reaction under normal use.
Should be avoided: High temperature.
Incompatible substances: Strong acid/alkali.
Harmful decomposition products: Carbonic oxide, carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Signs and Symptoms of Overexposure: Inhalation of welding fumes and gases can be dangerous to your health. Classification of welding fumes is difficult because of varying base materials, coatings, air contaminants and processes. The International Agency for Research on Cancer has classified welding fumes as possibly carcinogenic to humans.

Acute Effects: Overexposure to welding fumes may result in symptoms like metal fume fever, dizziness, nausea, dryness or irritation of the nose, throat or eyes. May cause sensitization by skin contact.

LD50 : per oral, rat	5mg/kg (IUCLID)
LD50 : per skin, hare	unknown
LC50 : inhalation, rat	60,000 ppm 4 hr. (RTECS)
skin irritation or corrosion	unclassified
eye irritation or corrosion	unclassified
respiration or skin sensibility	unclassified
germ cell mutagenicity	unclassified
carcinogenicity	unclassified
reproduction toxicity	unclassified
Specific target organ system toxicity-One-off contact	unclassified
Specific target organ system toxicity-Repeating contact	unclassified

inhalation risk	Unclassified

Chronic Effects: Overexposure to welding fumes may affect pulmonary function and eyes.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: Solder wire contains metals which are considered to be very toxic towards aquatic organisms. Finely divided solder wire are therefore considered harmful to aquatic organisms.
Persistence and Degradability: The solder wire consists of elements that cannot degrade any further in the environment.
Bio-accumulative Potential: Solder wire contains heavy metals which bio accumulates in the food chain. The following figures are the bio concentration factor (BCF) for the substances on their own.
BCF:
Tin, BCF: 65000
Silver, BCF: 35000
Mobility in Soil: Solder wire is not soluble in water or soil. Particles formed by working solder wire can be transported in the air.
Other Adverse Effects: In massive form, solder wire present no hazards to the aquatic environment. Welding materials could degrade into components originating from the materials used in the welding process. Avoid exposure to conditions that could lead to accumulation in soils or groundwater. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Product: For product elimination, consult recycling companies or appropriate local authority.
Package: May be disposed in approved landfills provided local regulations are observed.

SECTION 14: TRANSPORT INFORMATION

UN number: Solder wire is not classified as dangerous goods for transport and has no UN number.
UN proper shipping name: Solder wire is not classified as dangerous goods for transport and has no UN proper shipping name.

Transport hazard class: Solder wire is not classified as dangerous goods for transport.
Packing group: There are not any special precautions with which a user should or must comply or be aware of in connection with transport or conveyance either within or outside premises.
Special precautions for users: There are not any special precautions which a user should or must comply or be aware of in connection with transport or conveyance either within or outside premises of the welding rod.

SECTION 15: REGULATION INFORMATION

Special regulation/legislation of safety, health and environmental for materials and mixtures: If recorded by chemical catalogues of other countries

IECSC : Not recorded.
EINECS : Not recorded.
EPA TSCA : Not recorded.

DSL/NDSL : Not recorded.
GB12268-2012 : hazardous articles list: Not recorded.

Below laws, regulations and standards make relevant stipulation for safe handling, storage, transportation, loading and unloading, classification and mark of chemicals.

The production safety law of the People's Republic of China.
The occupational disease prevention law of the People's Republic of China.
The environmental protection law of the People's Republic of China.
Hazardous chemical materials safety management regulation; Safety production license.

Downstream consumption attention:
Disposal should be in accordance with relevant law and regulations.

SECTION 16: OTHER INFORMATION

Change explain: According to standard GB/T16483-2008 <the chemical safety data sheet content and project>, revised the former version of SDS.
Detailed information: All information based on our current date, the SDS (the chemical safety data sheet) is for this product only.
Reader attention: Owner of enterprise can only be used as beneficial supplement of other information obtained, and should be judged to this date properly. Be sure if moderate use for this product, guarantee health and safety of the workers. This data does not provide a guarantee, if there is any use or behavior which violates this SDS or used with other products and programs, the consequence shall be borne by the users themselves.

Abbreviations:
ADR: International Carriage of Dangerous Goods by Road protocol.
IMDG: International Maritime Dangerous Goods Code.
EINECS: European Inventory of Existing Chemical Substances.
IATA: International Air Transport Association.
ICAO-TI: (ICAO) International Civil Aviation Organization.
CAS: Chemical Abstracts Service.
LC50: Lethal concentration 50%
EC50: Effective concentration 50%
LD50: Lethal dose of 50%

This safety data sheet was written based on optimum information of security and proper usage. Forney Industries, Inc. cannot guarantee the timeliness and other express information. Regarding this data, Forney Industries, Inc. does not bear any duty from the usage of this product. The user should confirm the best information for their special usage after their own research. Before using this product, every user should read this SDS carefully. If more information is needed for correct evaluation, please contact Forney Industries, Inc.

Hazard Statements:
H315-Causes skin irritation.
H319-Causes serious eye irritation.
H351-Suspected of causing lung Cancer.
H373-May cause damage to organs through prolonged or repeated exposure.

R-Phrases:
R36/38-Irritating to eyes and skin.
R40-Limited evidence of a carcinogenic effect.
R48-Danger of serious damage to health by prolonged exposure.
S-Phrases:
S36/37-Wear suitable protective clothing and gloves.
S43-In case of fire, use fire-fighting equipment on basis class D.

END OF SAFETY DATA SHEET.